

# Module Catalogue

for the Module studies (Bachelor)

# **Physics**

Examination regulations version: 2019 Responsible: Faculty of Physics and Astronomy

JMU Würzburg • generated 24-Feb-2024 • exam. reg. data record MB|128|-|-|H|2019



# **Contents**

The subject is divided into		5
Abbreviations used, Convention	rs, Notes, In accordance with	6
Summer Term 2019		8
Current Topics in Experimental Physics		9
Current Topics in Experimental Physics		10
Current Topics in Experimental Physics		11
Current Topics in Theoretical Physics		12
Current Topics in Theoretical Physics		13
Current Topics in Theoretical Physics		14
Selected Topics in Astrophysics		15
Selected Topics in Solid State Physics		16
Selected Topics in Particle Physics		17
Selected Topics in Theoretical Physics		18
Winter Term 2019		19
Current Topics in Experimental Physics		20
Current Topics in Experimental Physics		21
Current Topics in Experimental Physics		22
Current Topics in Theoretical Physics		23
Current Topics in Theoretical Physics		24
Current Topics in Theoretical Physics		25
Selected Topics in Astrophysics Selected Topics in Solid State Physics		26
Selected Topics in Solid State Physics Selected Topics in Particle Physics		27 28
Selected Topics in Theoretical Physics		26 29
Summer Term 2020		
		30
Current Topics in Experimental Physics		31
Current Topics in Experimental Physics Current Topics in Experimental Physics		32
Current Topics in Theoretical Physics		33
Current Topics in Theoretical Physics		34 35
Current Topics in Theoretical Physics		36
Selected Topics in Astrophysics		37
Selected Topics in Solid State Physics		38
Selected Topics in Particle Physics		39
Selected Topics in Theoretical Physics		40
Winter Term 2020		41
Current Topics in Experimental Physics		42
Current Topics in Experimental Physics		43
Current Topics in Experimental Physics		44
Current Topics in Theoretical Physics		45
Current Topics in Theoretical Physics		46
Current Topics in Theoretical Physics		47
Selected Topics in Astrophysics		48
Selected Topics in Solid State Physics		49
Selected Topics in Particle Physics		50
Selected Topics in Theoretical Physics		51
Summer Term 2021		52
Current Topics in Experimental Physics		53
Current Topics in Experimental Physics		54
Current Topics in Experimental Physics		55
Current Topics in Theoretical Physics		56
Current Topics in Theoretical Physics		57
Current Topics in Theoretical Physics		58
Physics (2010)	III Würzburg • generated 24-Feb-2024 • exam, reg. data record MBI128I-I-IHI2010	nage 2 / 128



Selected Topics in Astrophysics Selected Topics in Political Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Selected Physics Selected Topics in Selected Physics Selected Topics in Selected Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Selected Physics Selected Topics in Theoretical Physics Selected Topics in Selected Physics S		
Selected Topics in Particle Physics Selected Topics in Theoretical Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Particle Physics Selected Topics in Experimental Physics Current Topics in Theoretical Physics Current Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topi	· · · · · · · · · · · · · · · · · · ·	
Selected Topics in Theoretical Physics  Winter Term 2021  Current Topics in Experimental Physics Current Topics in Theoretical Physics Current Topics in Theoretical Physics Current Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Stidd State Physics Selected Topics in Patricle Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Stidd State Physics Selected Topics in Steprimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in State Physics Selected Topics in State Physics Selected Topics in Theoretical Physics Selected Topics in Physics Selected Topics in Physics Selec		
Winter Term 2021 Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Teoretical Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Satrophysics Selected Topics in Pharticle Physics Selected Topics in Experimental Physics Summer Term 2022 Current Topics in Experimental Physics Current Topics in Term Solid State Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Term Solid State Physics Selected Topics in Term Solid Physics Selected Topics in Term Solid Physics Selected Topics in Term Solid Physics Solid Solid State Physic		
Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Patricle Physics Selected Topics in Patricle Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Summer Term 2022 74 Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Solid State Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Selected Topics in Theoretical		
Current Topics in Experimental Physics 65 Current Topics in Theoretical Physics 67 Selected Topics in Astrophysics 77 Selected Topics in Solid State Physics 77 Selected Topics in Particle Physics 77 Selected Topics in Particle Physics 77 Selected Topics in Particle Physics 77 Summer Term 2022 Current Topics in Experimental Physics 77 Current Topics in Experimental Physics 77 Current Topics in Experimental Physics 77 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 78 Selected Topics in Experimental Physics 79 Selected Topics in Theoretical Physics 79 Selected Topics in Solid State Physics 79 Selected Topics in Theoretical Physics 79 Selected Topics in Solid State Physics 79 Summer Term 2023 79 Current Topics in	Winter Term 2021	63
Current Topics in Experimental Physics 66 Current Topics in Theoretical Physics 68 Current Topics in Theoretical Physics 68 Current Topics in Theoretical Physics 69 Selected Topics in Solid State Physics 70 Selected Topics in Solid State Physics 72 Selected Topics in Physics 72 Selected Topics in Particle Physics 72 Selected Topics in Particle Physics 73 Summer Term 2022 73 Current Topics in Experimental Physics 75 Current Topics in Experimental Physics 75 Current Topics in Experimental Physics 76 Current Topics in Experimental Physics 77 Current Topics in Experimental Physics 77 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 78 Selected Topics in Solid State Physics 78 Selected Topics in Seperimental Physics 78 Selected Topics in Solid State Physics 78 Selected Topics in Solid State Physics 78 Selected Topics in Experimental Physics 78 Selected Topics in Experimental Physics 78 Selected Topics in Experimental Physics 78 Selected Topics in Theoretical Physics 78 Current Topics in Experimental Physics 78 Current Topics in Experimental Physics 78 Current Topics in Experimental Physics 78 Current Topics in Theoretical Physics 79 Current Topics in Theoretical Physics 79 Current Topics in Theoretical Physics 79 Selected Topics in Experimental Physics 79 Selected Topics in Theoretical Physics 79 Selected Topics in Theoretical Physics 79 Selected Topics in Experimental Physics 79 Selected Topics in Theoretical Physics 79 Selected Topics in Theoretical Physics 79 Selected Topics in Experimental Physics 79 Current Topics in Experimental Ph	Current Topics in Experimental Physics	64
Current Topics in Theoretical Physics Current Topics in Theoretical Physics Current Topics in Theoretical Physics Selected Topics in Satrophysics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Current Topics in Theoretical Physics Current Topics in Theoretical Physics Current Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Experimental Physics Selected Topics in Subject Selected	Current Topics in Experimental Physics	65
Current Topics in Theoretical Physics Current Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Proteitical Physics Selected Topics in Particle Physics Selected Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Experimental Physics Current Topics in Experimental Physics Selected Topics in Farticle Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Current Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Selectical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Selectical Physics Selected Topics in Experimental Phys	Current Topics in Experimental Physics	66
Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Solid State Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Sourmer Term 2022 Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Solid State Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Theoretical Physics Surrent Topics in Theoretical Physics Surrent Topics in Theoretical Physics Selected Topics in Experimental Physics Surment Topics in Theoretical Physics Surment Topics in Theoretical Physics Selected Topics in Experimental Physics Selected	Current Topics in Theoretical Physics	67
Selected Topics in Astrophysics Selected Topics in Politic Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Stophysics Selected Topics in Selected Physics Selected Topics in Selected Physics Selected Topics in Theoretical Physics Selected Topics in Selected Physics Selected Topics in Theoretical Physics Selected Topics in Selected Physics Selected Topics in Theoretical Physics Selected Topics in Strophysics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Percentical Physics Selected Topics in	Current Topics in Theoretical Physics	68
Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics  Summer Term 2022 Curnent Topics in Experimental Physics Curnent Topics in Experimental Physics Curnent Topics in Experimental Physics Curnent Topics in Texperimental Physics Curnent Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Winter Term 2022 Curnent Topics in Experimental Physics Surnent Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Surnent Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Theoretical Physics Selected Topics in Seperimental Physics Selected Topics in Seperimental Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Patricle Physics Selected Topics in	Current Topics in Theoretical Physics	69
Selected Topics in Particle Physics Selected Topics in Theoretical Physics Summer Term 2022 Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Solid State Physics Selected Topics in Teoretical Physics Selected Topics in Teoretical Physics Selected Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Solid State Physics Selected Topics in Interoretical Physics Selected Topics in Particle Physics Selected Topics in Interoretical Physics Selected Topics in Teoretical Physics Selected Topics in Seperimental Physics Surment Topics in Experimental Physics Surment Topics in Experimental Physics Surment Topics in Teoretical Physics Selected Topics in Teoretical Physics Selected Topics in Teoretical Physics Selected Topics in Seperimental Physics Selected Topics in Physik Selected Topics	Selected Topics in Astrophysics	70
Selected Topics in Theoretical Physics 73  Summer Term 2022 74  Current Topics in Experimental Physics 75  Current Topics in Experimental Physics 76  Current Topics in Experimental Physics 77  Current Topics in Theoretical Physics 77  Current Topics in Theoretical Physics 77  Current Topics in Theoretical Physics 79  Current Topics in Theoretical Physics 80  Selected Topics in Astrophysics 82  Selected Topics in Solid State Physics 82  Selected Topics in Theoretical Physics 83  Selected Topics in Theoretical Physics 83  Selected Topics in Theoretical Physics 84  Winter Term 2022 85  Current Topics in Experimental Physics 86  Current Topics in Experimental Physics 87  Current Topics in Experimental Physics 88  Current Topics in Experimental Physics 89  Current Topics in Theoretical Physics 89  Current Topics in Theoretical Physics 90  Current Topics in Theoretical Physics 90  Selected Topics in Theoretical Physics 91  Selected Topics in Theoretical Physics 92  Selected Topics in Theoretical Physics 93  Selected Topics in Experimental Physics 93  Current Topics in Experimental Physics 95  Summer Term 2023 96  Current Topics in Experimental Physics 99  Current Topics in Experimental Physics 99  Current Topics in Experimental Physics 99  Current Topics in Theoretical Physics 99  Current Topics in Experimental Physics 99  Current Topics in Experimental Physics 99  Current Topics in Experimental Physics 99  Current Topics in Pheoretical	Selected Topics in Solid State Physics	71
Summer Term 2022 Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Satrophysics Selected Topics in Satrophysics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Theoretical Physics Selected Topics in Flavoretical Physics Selected Topics in Satrophysics Selected Topics in Selected Topics in Selected Physics Selected Topics in Selected	Selected Topics in Particle Physics	72
Current Topics in Experimental Physics 75 Current Topics in Experimental Physics 76 Current Topics in Theoretical Physics 77 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 80 Current Topics in Theoretical Physics 80 Selected Topics in Strophysics 81 Selected Topics in Particle Physics 82 Selected Topics in Particle Physics 83 Selected Topics in Theoretical Physics 83 Selected Topics in Theoretical Physics 84 Current Topics in Experimental Physics 84 Current Topics in Experimental Physics 85 Current Topics in Experimental Physics 86 Current Topics in Experimental Physics 87 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Farticle Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Experimental Physics 90 Selected Topics in Experimental Physics 90 Selected Topics in Experimental Physics 90 Current Topics in Theoretical Physics 90 Current Topics in Experimental Physics 90 Current Topics in	Selected Topics in Theoretical Physics	73
Current Topics in Experimental Physics 75 Current Topics in Experimental Physics 76 Current Topics in Theoretical Physics 77 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 80 Current Topics in Theoretical Physics 80 Selected Topics in Strophysics 81 Selected Topics in Particle Physics 82 Selected Topics in Particle Physics 83 Selected Topics in Theoretical Physics 83 Selected Topics in Theoretical Physics 84 Current Topics in Experimental Physics 84 Current Topics in Experimental Physics 85 Current Topics in Experimental Physics 86 Current Topics in Experimental Physics 87 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Farticle Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Experimental Physics 90 Selected Topics in Experimental Physics 90 Selected Topics in Experimental Physics 90 Current Topics in Theoretical Physics 90 Current Topics in Experimental Physics 90 Current Topics in	Summer Term 2022	74
Current Topics in Experimental Physics 76 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 79 Current Topics in Theoretical Physics 79 Current Topics in Theoretical Physics 80 Selected Topics in Astrophysics 81 Selected Topics in Solid State Physics 82 Selected Topics in Particle Physics 82 Selected Topics in Particle Physics 83 Selected Topics in Theoretical Physics 84 Winter Term 2022 85 Current Topics in Experimental Physics 86 Current Topics in Experimental Physics 86 Current Topics in Experimental Physics 87 Current Topics in Theoretical Physics 88 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 90 Current Topics in Theoretical Physics 90 Current Topics in Theoretical Physics 91 Selected Topics in Solid State Physics 92 Selected Topics in Solid State Physics 93 Selected Topics in Farticle Physics 93 Selected Topics in Farticle Physics 94 Selected Topics in Experimental Physics 95 Summer Term 2023 96 Current Topics in Experimental Physics 99 Current Topics in Theoretical Physics 90 Current Topics in Theoretical Physics 90 Current Topics in Theoretical Physics 90 Current Topics in Netrophysics 90 Current Topics in Faperimental Physics 90 Current Topics in Seperimental Physics 90 Current Topics in Experimental Physics 90 Current Topics in Experimental Physics 90 Current Topics in Seperimental Physics 90 Current Topics in Experimental Ph		
Current Topics in Experimental Physics 77 Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 79 Current Topics in Theoretical Physics 80 Selected Topics in Solid State Physics 81 Selected Topics in Particle Physics 82 Selected Topics in Particle Physics 83 Selected Topics in Foot 84 Winter Term 2022 85 Current Topics in Experimental Physics 86 Current Topics in Experimental Physics 87 Current Topics in Experimental Physics 87 Current Topics in Experimental Physics 88 Current Topics in Experimental Physics 89 Current Topics in Theoretical Physics 90 Selected Topics in Theoretical Physics 90 Selected Topics in Theoretical Physics 92 Selected Topics in Theoretical Physics 93 Selected Topics in Theoretical Physics 93 Selected Topics in Theoretical Physics 95 Summer Term 2023 96 Current Topics in Experimental Physics 97 Current Topics in Experimental Physics 99 Current Topics in Theoretical Physics 90 Current Topics in Experimental Physics 90 Current Topics in Physik 90 Current Topics in Experimental Physics 90 Current Topics in Experimental Physics 90 Current Topics in Physik 90 Current Topics in Experimental Physics 90 Current Topics in Physik 90 Current Topics in Physik 90 Current Topics in Physik 90 Current Topi		
Current Topics in Theoretical Physics 78 Current Topics in Theoretical Physics 80 Selected Topics in Astrophysics 81 Selected Topics in Solid State Physics 82 Selected Topics in Solid State Physics 83 Selected Topics in Particle Physics 83 Selected Topics in Particle Physics 83 Selected Topics in Theoretical Physics 84 Winter Term 2022 85 Current Topics in Experimental Physics 86 Current Topics in Experimental Physics 87 Current Topics in Experimental Physics 88 Current Topics in Experimental Physics 88 Current Topics in Theoretical Physics 88 Current Topics in Theoretical Physics 88 Current Topics in Theoretical Physics 90 Current Topics in Theoretical Physics 91 Selected Topics in Theoretical Physics 92 Selected Topics in Solid State Physics 93 Selected Topics in Solid State Physics 93 Selected Topics in Experimental Physics 94 Selected Topics in Experimental Physics 95 Summer Term 2023 96 Current Topics in Experimental Physics 97 Current Topics in Experimental Physics 99 Current Topics in Theoretical Physics 99 Current Topics in Theoretical Physics 90 Current Topics in Experimental Physics 90 Current Topics	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Preoretical Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Surrent Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Surrent Topics in Inteoretical Physics Surrent Topics in Inteoretical Physics Surrent Topics in Seperimental Physics Surrent Topics in Physik Surrent Topi	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Opid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics Selected Topics in Facticle Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Summer Term 2023 Selected Topics in Experimental Physics Summer Topics in Experimental Physics Summer Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topics in Steperimental Physics Selected Topics in Physik Selected Topics in Steperimental Physics Selected Topics in Steperi	·	
Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Servent Topics in Experimental Physics Servent Topics in Experimental Physics Servent Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Experimental Physics Selected Topics in Theoretical Physics Selected Topics in Sexperimental Phy	·	
Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics Winter Term 2022  Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Experimental Physics Summer Term 2023  Current Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Theoretical Physics Selected Topics in Theoretical Physics Surrent Topics in Theoretical Physics Surrent Topics in Theoretical Physics Selected Topics in Satrophysics Selected Topics in Particle Physics Selected Topics in Experimental Physics Selected Topics in Physik Selected Topics in Physik Selected Topics in Physik Selecte	·	
Selected Topics in Particle Physics Selected Topics in Theoretical Physics Winter Term 2022 S5 Current Topics in Experimental Physics S6 Current Topics in Experimental Physics S7 Current Topics in Experimental Physics S8 Current Topics in Experimental Physics S8 Current Topics in Theoretical Physics S8 Current Topics in Theoretical Physics S9 Current Topics in Theoretical Physics S9 Current Topics in Theoretical Physics S9 Selected Topics in Astrophysics S9 Selected Topics in Solid State Physics S9 Selected Topics in Particle Physics S9 Selected Topics in Theoretical Physics S9 Current Topics in Experimental Physics S9 Current Topics in Theoretical Physics S9 Current Topics in Physik S9 Current Topics in Experimental Physics S9	· · · · · · · · · · · · · · · · · · ·	82
Selected Topics in Theoretical Physics  Winter Term 2022  Current Topics in Experimental Physics Current Topics in Theoretical Physics Current Topics in Astrophysics Selected Topics in Astrophysics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Ferrental Physics Selected Topics in Experimental Physics Summer Term 2023 Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Physik Current Topics in Physik Current Topics in Physik Current Topics in Physik Current Topics in Experimental Physics Current Topics in Physik Current Topics in Experimental Physics 103 Current Topics in Experimental Physics 104 Current Topics in Experimental Physics 105 Current Topics in Experimental Physics 106 Current Topics in Experimental Physics 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 119 Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Physik 113 Current Topics in Theoretical Physics 114		83
Winter Term 2022 Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Farticle Physics Selected Topics in Farticle Physics Selected Topics in Experimental Physics Summer Term 2023 Selected Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics 102 Selected Topics in Particle Physics 103 Selected Topics in Particle Physics 104 Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 110 Current Topics in Experimental Physics 111 Current Topics in Physik 112 Current Topics in Physik 113 Current Topics in Theoretical Physics 114		
Current Topics in Experimental Physics 87 Current Topics in Experimental Physics 87 Current Topics in Experimental Physics 88 Current Topics in Theoretical Physics 89 Current Topics in Theoretical Physics 90 Current Topics in Theoretical Physics 90 Current Topics in Theoretical Physics 91 Selected Topics in Astrophysics 92 Selected Topics in Particle Physics 93 Selected Topics in Particle Physics 94 Selected Topics in Particle Physics 94 Selected Topics in Experimental Physics 95 Summer Term 2023 96 Current Topics in Experimental Physics 97 Current Topics in Experimental Physics 99 Current Topics in Experimental Physics 99 Current Topics in Theoretical Physics 99 Current Topics in Theoretical Physics 100 Current Topics in Theoretical Physics 101 Current Topics in Particle Physics 102 Selected Topics in Particle Physics 103 Selected Topics in Physik 105 Current Topics in Physik 105 Current Topics in Experimental Physics 104 Current Topics in Physik 105 Current Topics in Experimental Physics 106 Winter Term 2023 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 110 Current Topics in Physik 111 Current Topics in Theoretical Physics 111 Current Topics in Theoretical Physics 1113 Current Topics in Theoretical Physics 1114		
Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Inteoretical Physics Selected Topics in Farticle Physics Summer Term 2023 Current Topics in Experimental Physics Current Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Experimental Physics Surrent Topics in Theoretical Physics Surrent Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Selected Topics in Particle Physics Selected Topics in Physik Selected Topics in Physik Selected Topics in Physik Selected Topics in Physik Selected Topics in Sexperimental Physics Selected Topics in Sexperimental Physics Selected Topics in Sexperimental Selected Selecte		_
Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics Summer Term 2023 Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Physik Current Topics in Physik 105 Current Topics in Physik 106 Current Topics in Experimental Physics 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 110 Current Topics in Experimental Physics 110 Current Topics in Experimental Physics 110 Current Topics in Experimental Physics 111 Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics 90 Current Topics in Theoretical Physics 990 Current Topics in Theoretical Physics 991 Selected Topics in Astrophysics 992 Selected Topics in Solid State Physics 993 Selected Topics in Particle Physics 994 Selected Topics in Particle Physics 995 Summer Term 2023 996 Current Topics in Experimental Physics 997 Current Topics in Experimental Physics 997 Current Topics in Experimental Physics 998 Current Topics in Experimental Physics 998 Current Topics in Theoretical Physics 999 Current Topics in Theoretical Physics 1000 Current Topics in Theoretical Physics 1001 Current Topics in Theoretical Physics 1002 Selected Topics in Astrophysics 1003 Selected Topics in Particle Physics 1004 Current Topics in Physik 1005 Current Topics in Physik 1005 Current Topics in Experimental Physics 1009 Current Topics in Experimental Physics 1009 Current Topics in Experimental Physics 1100 Current Topics in Experimental Physics 1100 Current Topics in Experimental Physics 1100 Current Topics in Physik 1111 Current Topics in Theoretical Physics 1113 Current Topics in Theoretical Physics 1113 Current Topics in Theoretical Physics 1114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics 91 Selected Topics in Astrophysics 92 Selected Topics in Solid State Physics 93 Selected Topics in Particle Physics 93 Selected Topics in Particle Physics 94 Selected Topics in Theoretical Physics 95 Summer Term 2023 96 Current Topics in Experimental Physics 97 Current Topics in Experimental Physics 98 Current Topics in Experimental Physics 99 Current Topics in Experimental Physics 99 Current Topics in Theoretical Physics 99 Current Topics in Theoretical Physics 99 Current Topics in Theoretical Physics 100 Current Topics in Theoretical Physics 101 Current Topics in Theoretical Physics 102 Selected Topics in Astrophysics 103 Selected Topics in Particle Physics 104 Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 110 Current Topics in Experimental Physics 111 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Theoretical Physics 1113 Current Topics in Theoretical Physics 1113 Current Topics in Theoretical Physics 1113 Current Topics in Theoretical Physics 1114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics 92 Selected Topics in Solid State Physics 93 Selected Topics in Particle Physics 94 Selected Topics in Particle Physics 94 Selected Topics in Theoretical Physics 95 Summer Term 2023 96 Current Topics in Experimental Physics 97 Current Topics in Experimental Physics 98 Current Topics in Experimental Physics 98 Current Topics in Experimental Physics 99 Current Topics in Theoretical Physics 99 Current Topics in Theoretical Physics 100 Current Topics in Theoretical Physics 101 Current Topics in Theoretical Physics 102 Selected Topics in Theoretical Physics 103 Selected Topics in Particle Physics 104 Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 110 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	·	
Selected Topics in Astrophysics Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Summer Term 2023 Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Particle Physics Current Topics in Physik Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 Current Topics in Experimental Physics Current Topics in Physik 110 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Theoretical Physics 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	·	
Selected Topics in Solid State Physics Selected Topics in Particle Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Summer Term 2023 Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Particle Physics Current Topics in Physik Current Topics in Physik Current Topics in Physik 106 Winter Term 2023 Current Topics in Experimental Physics Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	·	
Selected Topics in Particle Physics Selected Topics in Theoretical Physics Selected Topics in Theoretical Physics Summer Term 2023 Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Particle Physics Current Topics in Physik Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 110 Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	· · · · · · · · · · · · · · · · · · ·	
Selected Topics in Theoretical Physics95Summer Term 202396Current Topics in Experimental Physics97Current Topics in Experimental Physics98Current Topics in Experimental Physics99Current Topics in Theoretical Physics100Current Topics in Theoretical Physics101Current Topics in Theoretical Physics102Selected Topics in Astrophysics103Selected Topics in Particle Physics104Current Topics in Physik105Current Topics in Physik106Winter Term 2023107Current Topics in Experimental Physics108Current Topics in Experimental Physics109Current Topics in Experimental Physics110Current Topics in Physik111Current Topics in Physik111Current Topics in Physik111Current Topics in Theoretical Physics113Current Topics in Theoretical Physics113Current Topics in Theoretical Physics114		
Summer Term 2023 Current Topics in Experimental Physics Current Topics in Theoretical Physics Current Topics in Theoretical Physics Current Topics in Theoretical Physics Current Topics in Astrophysics Selected Topics in Astrophysics Selected Topics in Particle Physics Current Topics in Physik Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 109 Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114		
Current Topics in Experimental Physics Current Topics in Theoretical Physics Selected Topics in Astrophysics Selected Topics in Particle Physics Current Topics in Physik Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 109 Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics	Summer Term 2023	
Current Topics in Experimental Physics 98 Current Topics in Experimental Physics 99 Current Topics in Theoretical Physics 100 Current Topics in Theoretical Physics 101 Current Topics in Theoretical Physics 102 Selected Topics in Astrophysics 103 Selected Topics in Particle Physics 104 Current Topics in Physik 105 Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 110 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114		· · · · · · · · · · · · · · · · · · ·
Current Topics in Experimental Physics 100 Current Topics in Theoretical Physics 101 Current Topics in Theoretical Physics 102 Selected Topics in Astrophysics 103 Selected Topics in Particle Physics 104 Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 109 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics 100 Current Topics in Theoretical Physics 101 Current Topics in Theoretical Physics 102 Selected Topics in Astrophysics 103 Selected Topics in Particle Physics 104 Current Topics in Physik 105 Current Topics in Physik 106 Winter Term 2023 107 Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 110 Current Topics in Physik 111 Current Topics in Physik 111 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics101Current Topics in Theoretical Physics102Selected Topics in Astrophysics103Selected Topics in Particle Physics104Current Topics in Physik105Current Topics in Physik106Winter Term 2023107Current Topics in Experimental Physics108Current Topics in Experimental Physics109Current Topics in Experimental Physics110Current Topics in Physik111Current Topics in Physik111Current Topics in Theoretical Physics113Current Topics in Theoretical Physics113Current Topics in Theoretical Physics114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics102Selected Topics in Astrophysics103Selected Topics in Particle Physics104Current Topics in Physik105Current Topics in Physik106Winter Term 2023107Current Topics in Experimental Physics108Current Topics in Experimental Physics109Current Topics in Experimental Physics110Current Topics in Physik111Current Topics in Physik112Current Topics in Theoretical Physics113Current Topics in Theoretical Physics114		
Selected Topics in Astrophysics103Selected Topics in Particle Physics104Current Topics in Physik105Current Topics in Physik106Winter Term 2023107Current Topics in Experimental Physics108Current Topics in Experimental Physics109Current Topics in Experimental Physics110Current Topics in Physik111Current Topics in Physik112Current Topics in Theoretical Physics113Current Topics in Theoretical Physics114		
Selected Topics in Particle Physics  Current Topics in Physik  105  Current Topics in Physik  106  Winter Term 2023  Current Topics in Experimental Physics  110  Current Topics in Physik  Current Topics in Physik  Current Topics in Physik  111  Current Topics in Theoretical Physics  113  Current Topics in Theoretical Physics  114		
Current Topics in Physik105Current Topics in Physik106Winter Term 2023107Current Topics in Experimental Physics108Current Topics in Experimental Physics109Current Topics in Experimental Physics110Current Topics in Physik111Current Topics in Physik112Current Topics in Theoretical Physics113Current Topics in Theoretical Physics114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Physik  Winter Term 2023  Current Topics in Experimental Physics  110  Current Topics in Physik  Current Topics in Physik  111  Current Topics in Theoretical Physics  113  Current Topics in Theoretical Physics  114		•
Winter Term 2023 Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Experimental Physics Current Topics in Physik Current Topics in Physik Current Topics in Physik Current Topics in Theoretical Physics Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Experimental Physics 108 Current Topics in Experimental Physics 109 Current Topics in Experimental Physics 110 Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	·	
Current Topics in Experimental Physics109Current Topics in Experimental Physics110Current Topics in Physik111Current Topics in Physik112Current Topics in Theoretical Physics113Current Topics in Theoretical Physics114		-
Current Topics in Experimental Physics 110 Current Topics in Physik 111 Current Topics in Physik 112 Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Physik111Current Topics in Physik112Current Topics in Theoretical Physics113Current Topics in Theoretical Physics114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Physik112Current Topics in Theoretical Physics113Current Topics in Theoretical Physics114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics 113 Current Topics in Theoretical Physics 114	· · · · · · · · · · · · · · · · · · ·	
Current Topics in Theoretical Physics		
		_



Current Topics in Theoretical Physics	115
Selected Topics in Astrophysics	116
Selected Topics in Particle Physics	117
Summer Term 2024	118
Current Topics in Experimental Physics	119
Current Topics in Experimental Physics	120
Current Topics in Experimental Physics	121
Current Topics in Physik	122
Current Topics in Physik	123
Current Topics in Theoretical Physics	12/
Current Topics in Theoretical Physics	125
Current Topics in Theoretical Physics	126
Selected Topics in Astrophysics	127
Selected Topics in Particle Physics	128



# The subject is divided into

section / sub-section		starting page
Summer Term 2019	0	8
Winter Term 2019	0	19
Summer Term 2020	0	30
Winter Term 2020	0	41
Summer Term 2021	0	52
Winter Term 2021	0	63
Summer Term 2022	0	74
Winter Term 2022	0	85
Summer Term 2023	0	96
Winter Term 2023	0	107
Summer Term 2024	0	118



# **Abbreviations used**

Course types:  $\mathbf{E} = \text{field trip}$ ,  $\mathbf{K} = \text{colloquium}$ ,  $\mathbf{O} = \text{conversatorium}$ ,  $\mathbf{P} = \text{placement/lab course}$ ,  $\mathbf{R} = \text{project}$ ,  $\mathbf{S} = \text{seminar}$ ,  $\mathbf{T} = \text{tutorial}$ ,  $\ddot{\mathbf{U}} = \text{exercise}$ ,  $\mathbf{V} = \text{lecture}$ 

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: A = thesis, LV = course(s), PL = assessment(s), TN = participants, VL = prerequisite(s)

# **Conventions**

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

# **Notes**

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should the module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

# In accordance with

the general regulations governing the degree subject described in this module catalogue:

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

15-May-2019 (2019-36)

27-Jun-2019 (2019-41)

14-Nov-2019 (2019-52)

22-Jan-2020 (2020-13)

o6-May-2020 (2020-39)

22-Jul-2020 (2020-57)

17-Dec-2020 (2020-110)

10-Mar-2021 (2021-17)



```
o9-Jun-2021 (2021-58)
22-Dec-2021 (2021-85)
05-Jul-2022 (2022-52)
31-Jan-2023 (2022-86)
15-Jun-2023 (2023-58)
13-Dec-2023 (2023-107)
```

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.



# **Summer Term 2019**

(o ECTS credits)



e title				Abbreviation
t Topics	s in Experimental Physic	cs		11-BXE5-152-m01
coord	inator		Module offered by	
erson o	f examination committe	e	Faculty of Physics a	nd Astronomy
Metho	od of grading	Only after succ. con	pl. of module(s)	
nume	rical grade			
n	Module level	Other prerequisites		
ster	undergraduate	Approval from exam	ination committee re	equired.
ts		`		
		s. Accredited academi	c achievements, e.g.	in case of change of university
ed lear	ning outcomes			
the Bad tand th	chelor's programme. The ne measuring and/or eva	ey have knowledge of aluation methods nece	a current subdiscipli essary to acquire this	ne of Experimental Physics and
<b>S</b> (type, r	number of weekly contact hours,	, language — if other than Ger	man)	
R (2)				
		age — if other than German,	examination offered — if no	t every semester, information on whether
examin or pres tten exa ake the essmen date at	nation in groups (groups sentation/talk (approx. gamination was chosen as form of an oral examination tis changed, the lecture the latest.	of 2, approx. 30 minugo minutes). s method of assessmoation of one candidate er must inform student	tes per candidate) o ent, this may be char e each or an oral exar	r project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method
	e coord erson o nume on ster ts t topics y abroa delear dents the Bac tand the y the su s (type, r R (2) d of ass s creditab examir or pres tten exa ake the ssmen date at	tropics in Experimental Physical ecoordinator  erson of examination committee  Method of grading  numerical grade  Module level  ster undergraduate  ts  topics of Experimental Physical y abroad.  ed learning outcomes  dents have advanced compete the Bachelor's programme. The tand the measuring and/or evary the subject-specific contexts of the subject-specific contexts of the subject of weekly contact hours.  R (2)  d of assessment (type, scope, languate creditable for bonus)  examination (approx. 90 to 12 examination in groups (groups or presentation/talk (approx. 30 ten examination was chosen as ake the form of an oral examination is schanged, the lecture date at the latest.	tropics in Experimental Physics  coordinator  erson of examination committee  Method of grading  numerical grade  on Module level  ster undergraduate Approval from exam  ts  topics of Experimental Physics. Accredited academicy abroad.  ded learning outcomes  dents have advanced competencies corresponding to the Bachelor's programme. They have knowledge of a trand the measuring and/or evaluation methods neces to the subject-specific contexts and know the applicat stand the measuring and/or evaluation methods neces to the subject-specific contexts and know the applicat stand the measuring and/or evaluation methods neces to the subject contexts and know the applicat stand the measuring and/or evaluation methods neces to the subject contexts and know the applicat stand the measuring and/or evaluation methods neces to the subject contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the applicat stand the measuring and contexts and know the application of the stand the measuring and contexts and know the application an	responsible to the proper service of examination committee of examination committee of the provided of grading of the prerequisites of the provided of the pro

**Additional information** 

Workload

150 h

**Teaching cycle** 



		_			T		
Modul					Abbreviation		
Curren	Current Topics in Experimental Physics 11-BXE6-152-mo1						
Modul	e coord	inator		Module offered by			
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Meth	od of grading	Only after succ. con	pl. of module(s)			
6	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.		
Conter	its						
Curren or stud			. Accredited academi	c achievements, e.g	. in case of change of university		
Intend	ed lear	ning outcomes					
classif	y the su	ne measuring and/or evalubject-specific contexts a	nd know the applicat	ion areas.	s knowledge. They are able to		
		rocement (+	:f -+h +h C	iiiiiii	ot every semester, information on whether		
		ole for bonus)	ge — II other than German, i	exammation onered — ii no	of every semester, information on whether		
or oral pages) If a wristead to fassenation	examir or pres tten ex ake the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as the form of an oral examina	of 2, approx. 30 minu o minutes). o method of assessmo tion of one candidate o must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-		
Allocat	ion of	places					
Additio	nal inf	ormation					
Worklo	ad						
180 h							

**Teaching cycle** 



Module	title				Abbreviation	
Current	t Topic	s in Experimental Physic	ss.		11-BXE8-152-m01	
Module coordinator Module offered by						
chairpe	erson o	f examination committee	2	Faculty of Physics	s and Astronomy	
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)		
8	nume	rical grade	de			
Duratio	n	Module level	Other prerequisites	<b>i</b>		
1 seme	ster	undergraduate	Approval from exan	nination committee	e required.	
Conten	ts					
Current or stud			. Accredited academ	ic achievements, e	e.g. in case of change of university	
Intend	ed lear	ning outcomes				
sics of unders	the Ba tand th	chelor's programme. The	y have knowledge of luation methods nec	a current subdisci essary to acquire t	es of a module of Experimental Phy pline of Experimental Physics and his knowledge. They are able to	
Course	<b>S</b> (type, i	number of weekly contact hours,	language — if other than Ge	rman)		
V (4) +	R (2)					
		sessment (type, scope, langua ble for bonus)	age — if other than German,	examination offered — if	f not every semester, information on whether	
or oral	examir		of 2, approx. 30 minu		andidate each (approx. 30 minute ) or project report (approx. 8 to 10	

stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

## **Allocation of places**

--

## **Additional information**

--

# Workload

240 h

# **Teaching cycle**

--

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 

--



Module	title				Abbreviation		
Current	Topic	s in Theoretical Phys	ics		11-BXT5-152-m01		
Module coordinator Module offered by							
chairpe	rson o	f examination comm	ittee	Faculty of Physi	ics and Astronomy		
ECTS	Metho	od of grading	Only after succ. co	ompl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisite	es			
1 semes	ster	undergraduate	Approval from exa	mination committe	ee required.		
Content	ts						
Current study a		of Theoretical Physic	cs. Accredited academi	c achievements, e.	.g. in case of change of university o		
Intende	ed lear	ning outcomes					
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.							
Courses	<b>S</b> (type, r	number of weekly contact ho	ours, language — if other than (	German)			
V (2) + F	R (2)						
		<b>sessment</b> (type, scope, la ble for bonus)	anguage — if other than Germa	n, examination offered –	- if not every semester, information on whether		
or oral e	examir		ups of 2, approx. 30 min		candidate each (approx. 30 minute e) or project report (approx. 8 to 10		

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Language of assessment. German and of English
Allocation of places
Additional information
Workload

Teaching cycle

150 h



Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of univers study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whoodule is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) are readily or project report (approx. 8 for pages) or presentation/talk (approx. 30 minutes).	Modul	e title			Abbreviation	n
ECTS Method of grading Only after succ. compl. of module(s) 6 numerical grade  Duration Module level Other prerequisites 1 semester undergraduate Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of universitudy abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical sics of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on wimodule is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 mior oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 81 pages) or presentation/talk (approx. 30 minutes).	Curren	t Topic	s in Theoretical Physics		11-BXT6-152	-mo1
ECTS Method of grading Only after succ. compl. of module(s)  numerical grade  Duration Module level 1 semester undergraduate Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of universitudy abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretics of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on wimodule is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 mior oral examination in groups (groups of 2, approx. 30 minutes) per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).	Modul	e coord	linator		Module offered by	
Other prerequisites  1 semester undergraduate Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of univers study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on wimodule is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 mior oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).	chairpe	erson o	of examination committee	2	Faculty of Physics and Astronom	У
Duration Module level Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of univers study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoreti Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on who module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) are reasonable to approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).	ECTS	Meth	od of grading	Only after succ. cor	pl. of module(s)	
Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whoodule is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) are reported to approx. 8 to pages) or presentation/talk (approx. 30 minutes).	6	nume	rical grade			
Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of universitudy abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whoodule is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) are reported to project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).	Duratio	on	Module level	Other prerequisites		
Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of universitudy abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on wimodule is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) are oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).	1 seme	ster	undergraduate	Approval from exam	ination committee required.	
Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whoodule is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).	Conten	ıts	,			
The students have advanced competencies corresponding to the requirements of a module of Theoretical sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretic Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on who module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).				Accredited academic	achievements, e.g. in case of cha	nge of university or
sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretic Physics and have mastered the required methods. They are able to apply the acquired methods to current blems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (3) + R (1)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on who module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).	Intend	ed lear	ning outcomes			
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on who module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).	sics of Physics blems	the Ba s and h of Theo	chelor's programme. The nave mastered the require pretical Physics.	y have advanced spe ed methods. They are	cialist knowledge of a subdiscipli able to apply the acquired metho	ine of Theoretical
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on who module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).		-	number of weekly contact hours,	language — if other than Ge	man)	
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 mior oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to pages) or presentation/talk (approx. 30 minutes).						
or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 pages) or presentation/talk (approx. 30 minutes).				age — if other than German,	examination offered — if not every semester,	information on whether
If a written examination was chosen as method of assessment, this may be changed and assessment may	or oral pages)	examin or pre	nation in groups (groups sentation/talk (approx. 3	of 2, approx. 30 minu o minutes).	tes per candidate) or project repo	ort (approx. 8 to 10

stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

- anguage of decement comman and of inguisi
Allocation of places
Additional information
Workload

**Teaching cycle** 

180 h



Modul	e title				Abbreviation	
Curren	t Topic	s in Theoretical Physics			11-BXT8-152-m01	
Modul	e coord	inator		Module offered by	,	
chairp	erson o	f examination committee		Faculty of Physics	and Astronomy	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
8	nume	rical grade				
Duratio	on	Module level	Other prerequisites	i		
1 seme	ster	undergraduate	Approval from exam	ination committee	required.	
Conter	nts					
	t topics abroad.	-	Accredited academic	achievements, e.g.	in case of change of university o	
Intend	ed lear	ning outcomes				
sics of Physic	the Bad s and h	chelor's programme. The	y have advanced spe	cialist knowledge o	of a module of Theoretical Phy- f a subdiscipline of Theoretical cquired methods to current pro-	
Courses (type, number of weekly contact hours, language — if other than German)						
Course	P(a)					
<b>Course</b> V (4) +	N (2)					
V (4) + Metho	d of ass	sessment (type, scope, langua ple for bonus)	age — if other than German,	examination offered — if r	not every semester, information on whethe	

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami-

nation date at the latest. Language of assessment: German and/or English

Allocation of places

**Additional information** 

Workload

240 h

Teaching cycle



Module title Abbreviation					Abbreviation
Selected Topics in Astrophysics 11-CSA6-152-mo1					11-CSA6-152-m01
Modul	e coord	inator		Module offered by	Į.
chairp	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	ıpl. of module(s)	
6	nume	rical grade			
Durati	on	Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.
Conte	nts				
Select	ed topio	cs of Astrophysics.			
Intend	ed lear	ning outcomes			
tion m	ethods				stand the measuring and evalua- subject-specific contexts and
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)	
V (3) +	R (1)				
		sessment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether
or oral pages) If a wri stead i of asso nation	examir or pres tten exa take the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). o method of assessmo tion of one candidate o must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-
Alloca	tion of p	olaces			
Additi	onal inf	ormation			
Workle	oad				
180 h					
Teachi	ing cycl	e			
Referr	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)	



Module title Abbreviation					Abbreviation
Select	Selected Topics in Solid State Physics 11-CSF6-152-mo1				
Module coordinator Modu				Module offered by	
chairp	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	ıpl. of module(s)	
6	nume	rical grade			
Durati	on	Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.
Conte	nts				
Select	ed topio	s of Solid-State Physics.			
Intend	ed lear	ning outcomes			
and ev	aluatio′				nd understand the measuring classify the subject-specific con-
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)	
V (3) +	R (1)				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether
or oral pages) If a wri stead i of asso nation	examir or pres tten exa take the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). o method of assessme tion of one candidate o must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-
Alloca	tion of p	olaces			
Additi	onal inf	ormation			
Workle	oad				
180 h					
Teachi	ing cycl	e			
Referr	ed to in	LPO I (examination regulation:	s for teaching-degree progra	mmes)	
	-				



Module title Abbreviation						
Selected Topics in Particle Physics	Selected Topics in Particle Physics 11-CST6-152-mo1					
Module coordinator		Module offered by				
chairperson of examination committee		Faculty of Physics a	and Astronomy			
ECTS Method of grading	Only after succ. con					
6 numerical grade		,				
Duration Module level	Other prerequisites					
1 semester undergraduate	Approval from exam	ination committee r	equired.			
Contents			·			
Selected topics of Particle Physics.						
Intended learning outcomes						
The students have basic knowledge of theoretical methods necessary to acquand know the application areas.						
Courses (type, number of weekly contact hours, la	anguage — if other than Ger	rman)				
V (3) + R (1)						
<b>Method of assessment</b> (type, scope, language module is creditable for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether			
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocation of places						
Additional information						
Workload						
180 h						
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						



Module	Module title Abbreviation						
Selecte	Selected Topics in Theoretical Physics 11-CSTh6-152-mo1						
Module coordinator Module offered by							
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)			
6	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.		
Conten	ts						
Selecte	d topic	s of Theoretical Physics.					
Intende	ed lear	ning outcomes					
					have mastered the necessary problems of Theoretical Physics.		
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)			
V (3) +	R (1)						
		<b>sessment</b> (type, scope, langua ble for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether		
or oral pages) If a writ stead to of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
180 h							
Teachi	ng cycl	e					
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)			



# Winter Term 2019

(o ECTS credits)



1 1							
	Module title				Abbreviation		
Curren	Current Topics in Experimental Physics 11-BXE5-152-mo1						
Module	e coord	inator		Module offered by			
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.		
Conten	its						
Current or stud			. Accredited academi	c achievements, e.g	. in case of change of university		
Intend	ed lear	ning outcomes					
classif	y the su	ne measuring and/or evalobject-specific contexts and number of weekly contact hours,	nd know the applicat	ion areas.	s knowledge. They are able to		
V (2) +	R (2)						
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether		
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Allocat			. <u> </u>				
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachi	ng cycl	e					



Modul	e title				Abbreviation		
Current Topics in Experimental Physics 11-BXE6-152-mo1					11-BXE6-152-m01		
Modul	e coord	inator		Module offered by			
chairp	erson o	f examination committee	!	Faculty of Physics	and Astronomy		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
6	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ester	undergraduate	Approval from exam	ination committee	required.		
Conter	ıts						
	t topics ly abroa		. Accredited academi	c achievements, e.g	g. in case of change of university		
Intend	ed lear	ning outcomes					
sics of unders	the Bac stand th	chelor's programme. The	y have knowledge of luation methods nece	a current subdiscip essary to acquire thi	of a module of Experimental Phy line of Experimental Physics and s knowledge. They are able to		
Courses (type, number of weekly contact hours, language — if other than German)							
Course	V (3) + R (1)						
		<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)					
V (3) +	d of ass		,	examination onered in it			

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami-

Language of assessment: German and/or English

ΛII	000	tion	of n	laces
Au	uca	LIVII	טוט	lates

## **Additional information**

nation date at the latest.

# Workload

180 h

# **Teaching cycle**



					T		
	Module title Abbreviation						
Curren	Current Topics in Experimental Physics 11-BXE8-152-mo1						
Module	e coord	inator		Module offered by			
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)			
8	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.		
Conten	ts						
Current or stud	•		. Accredited academi	c achievements, e.g	. in case of change of university		
Intend	ed lear	ning outcomes					
classif	the su <b>s</b> (type, r	te measuring and/or evalubject-specific contexts a	nd know the applicat	ion areas.	s knowledge. They are able to		
		sessment (type scope langua	ge — if other than German	examination offered — if no	ot every semester, information on whether		
			ge in ourse than commun,		or oreal, semester, mornation on mischer		
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Allocat	Allocation of places						
Additio	nal inf	ormation					
Worklo	ad						
240 h	240 h						

**Teaching cycle** 



		///>//	J WE OVER ALL				
Module	Module title Abbreviation						
Current	Topic	s in Theoretical Physics	11-BXT5-152-m01				
Module	coord	inator		Module offered by			
chairpe	rson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.		
Conten	ts						
Current study a	•	-	accredited academic	achievements, e.g. i	n case of change of university or		
Intende	ed lear	ning outcomes					
Physics blems	and h		d methods. They are	able to apply the ac	a subdiscipline of Theoretical quired methods to current pro-		
V (2) +	R (2)						
		<b>sessment</b> (type, scope, langua ole for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether		
or oral pages) If a writ stead t of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocat	ion of <sub>l</sub>	places					
Additio	nal inf	ormation					
Worklo	ad						
150 h							
Teachi	ng cycl	e					



Modul	e title				Abbreviation	
Curren	t Topic	s in Theoretical Physi	cs		11-BXT6-152-m01	
Modul	e coord	linator		Module offer	ed by	
chairpe	erson c	of examination commi	ttee	Faculty of Phy	rsics and Astronomy	
ECTS	Meth	od of grading	Only after succ.	compl. of module	(s)	
6	nume	erical grade				
Duratio	on	Module level	Other prerequisi	ites		
1 seme	ester	undergraduate	Approval from ex	xamination commi	ttee required.	
Conter	nts					
	t topics abroad		s. Accredited acaden	nic achievements,	e.g. in case of change of university or	
Intend	ed lear	ning outcomes				
sics of Physics blems	the Ba s and h of Theo	chelor's programme. nave mastered the req pretical Physics.	They have advanced suired methods. They	specialist knowled are able to apply t	nents of a module of Theoretical Phy- lge of a subdiscipline of Theoretical the acquired methods to current pro-	
	_	number of weekly contact ho	urs, language — if other than	n German)		
V (3) +						
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)						
or oral pages)	examii or pre	nation in groups (grou sentation/talk (appro	ps of 2, approx. 30 m k. 30 minutes).	ninutes per candid	e candidate each (approx. 30 minute ate) or project report (approx. 8 to 10 e changed and assessment may in-	

stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

# **Allocation of places Additional information**

# Workload

180 h

# **Teaching cycle**



Module title Abbreviation					Abbreviation	
Current Topics in Theoretical Physics 11-BXT8-152-mo1					11-BXT8-152-m01	
Module coordinator				Module offered by		
chairperson of examination committee				Faculty of Physics and Astronomy		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
8	nume	rical grade				
Duratio	on	Module level	Other prerequisites	Other prerequisites		
1 seme	ster	undergraduate	Approval from examination committee required.			
Contents						
Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad.						

### **Intended learning outcomes**

The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.

Courses (type, number of weekly contact hours, language - if other than German)

V(4) + R(2)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

# Allocation of places

#### **Additional information**

--

#### Workload

240 h

### **Teaching cycle**

--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

--



Modul	Module title Abbreviation						
Select	Selected Topics in Astrophysics 11-CSA6-152-mo1						
Module coordinator Mod				Module offered by			
chairp	erson o	f examination committee	!	Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
6	nume	rical grade					
Durati	on	Module level	Other prerequisites				
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.		
Conter	nts						
Select	ed topio	cs of Astrophysics.					
Intend	ed lear	ning outcomes					
tion m	ethods				stand the measuring and evalua- subject-specific contexts and		
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)			
V (3) +	R (1)						
			ge — if other than German,	examination offered — if no	ot every semester, information on whether		
or oral pages) If a wri stead to of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Alloca	tion of p	olaces					
Additio	onal inf	ormation					
Worklo	oad						
180 h							
Teachi	ng cycl	e					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						
		-					



Modul	Module title Abbreviation					
Select	Selected Topics in Solid State Physics 11-CSF6-152-mo1					
Module coordinator Module o				Module offered by	<u>I</u>	
chairp	erson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	ıpl. of module(s)		
6	nume	rical grade				
Duration	on	Module level	Other prerequisites			
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.	
Conter	nts					
Selecte	ed topic	s of Solid-State Physics.				
Intend	ed lear	ning outcomes				
and ev	aluatio				nd understand the measuring classify the subject-specific con-	
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)		
V (3) +	R (1)					
		sessment (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
or oral pages) If a wri stead t of asse nation	examin or pres tten exa take the essmen date at	ation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). method of assessmo tion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Allocat	tion of p	olaces				
Additio	onal inf	ormation				
Worklo	oad					
180 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulation:	s for teaching-degree progra	mmes)		



Module title			Abbreviation		
Selected Topics in Particle Physics 11-CST6-152-mo1					
Module coordinator	Module coordinator Module offered by				
chairperson of examination committee		Faculty of Physics a	and Astronomy		
ECTS Method of grading	Only after succ. con				
6 numerical grade		,			
Duration Module level	Other prerequisites				
1 semester undergraduate	Approval from exam	ination committee r	equired.		
Contents			·		
Selected topics of Particle Physics.					
Intended learning outcomes					
The students have basic knowledge of theoretical methods necessary to acquand know the application areas.					
Courses (type, number of weekly contact hours, la	anguage — if other than Ger	man)			
V (3) + R (1)					
<b>Method of assessment</b> (type, scope, language module is creditable for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether		
written examination (approx. 90 to 120 or oral examination in groups (groups of pages) or presentation/talk (approx. 30 If a written examination was chosen as stead take the form of an oral examination dassessment is changed, the lecturer nation date at the latest.  Language of assessment: German and/	of 2, approx. 30 minutes). method of assessmetion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	r project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method		
Allocation of places					
Additional information					
Workload					
180 h					
Teaching cycle					
Referred to in LPO I (examination regulations	for toaching dogroo progra	mmec)			



Module	Module title Abbreviation					
Selecte	Selected Topics in Theoretical Physics 11-CSTh6-152-mo1					
Module	Module coordinator Module offered by					
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Selecte	d topic	s of Theoretical Physics.				
Intende	ed lear	ning outcomes				
					have mastered the necessary problems of Theoretical Physics.	
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
V (3) +	R (1)					
		sessment (type, scope, langua ble for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
or oral pages) If a writ stead to of asse nation	examir or pres tten exa ake the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as the form of an oral examina	of 2, approx. 30 minu o minutes). o method of assessmo tion of one candidate o must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
180 h						
Teachi	ng cycl	e				
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		



# **Summer Term 2020**

(o ECTS credits)



Module coordinator  Chairperson of examination committee  ECTS Method of grading  5 numerical grade  1 semester  Undergraduate  Contents  Current topics of Experimental Physics. Accredited academic achiever or study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requisites of the Bachelor's programme. They have knowledge of a current understand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination or or oral examination (approx. 90 to 120 minutes) or oral examination or or oral examination (approx. 30 minutes).  If a written examination (approx. 30 minutes).  If a written examination was chosen as method of assessment, this m stead take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload  150 h	Abbreviation					
chairperson of examination committee  ECTS Method of grading 5 numerical grade 7 numerical grade 8 numerical grade 9 numerical grade 1 semester undergraduate Approval from examination committee Surgery of Experimental Physics. Accredited academic achiever or study abroad.  Intended learning outcomes 1 he students have advanced competencies corresponding to the requisics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German) 1 (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination or oral examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes) or oral examination or oral examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places	Current Topics in Experimental Physics 11-BXE5-152-mo1					
Duration Module level Other prerequisites  1 semester undergraduate Approval from examination constitution and the sudents and the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination or or oral examination (approx. 90 to 120 minutes) or oral examination or or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information  Workload	ffered by					
Duration Module level Other prerequisites  1 semester undergraduate Approval from examination concents  Current topics of Experimental Physics. Accredited academic achiever or study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requisics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination or oral examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload	Physics and Astronomy					
Duration Module level Approval from examination cocontents  Current topics of Experimental Physics. Accredited academic achiever or study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requisics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination or oral examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload	module(s)					
Contents  Current topics of Experimental Physics. Accredited academic achiever or study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requisics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination or or all examination (approx. 90 to 120 minutes) or oral examination or or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this mastead take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload						
Contents  Current topics of Experimental Physics. Accredited academic achiever or study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requisics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination of module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload						
Current topics of Experimental Physics. Accredited academic achiever or study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requisics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination or module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload	mmittee required.					
Intended learning outcomes  The students have advanced competencies corresponding to the requisics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V (2) + R (2)  Method of assessment (type, scope, language — if other than German, examination of module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this mestead take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload						
The students have advanced competencies corresponding to the requisics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V(2) + R(2)  Method of assessment (type, scope, language — if other than German, examination of module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload	nents, e.g. in case of change of university					
sics of the Bachelor's programme. They have knowledge of a current sunderstand the measuring and/or evaluation methods necessary to a classify the subject-specific contexts and know the application areas.  Courses (type, number of weekly contact hours, language — if other than German)  V(2) + R(2)  Method of assessment (type, scope, language — if other than German, examination of module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload						
Method of assessment (type, scope, language — if other than German, examination of module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this material take the form of an oral examination of one candidate each or an of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Morkload						
module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload						
or oral examination in groups (groups of 2, approx. 30 minutes per capages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this method take the form of an oral examination of one candidate each or a of assessment is changed, the lecturer must inform students about the nation date at the latest.  Language of assessment: German and/or English  Allocation of places   Additional information   Workload	${\sf ffered-if}$ not every semester, information on whether					
Additional information Workload	ndidate) or project report (approx. 8 to 10 ay be changed and assessment may innoral examination in groups. If the method					
Workload						
Workload						
150 h						
Teaching cycle						



W	ÜRZBI	JRG 1	5 (12.)	33 9	Physics
Module	e title				Abbreviation
Curren	t Topic	s in Experimental Physic	s		11-BXE6-152-mo1
Module	e coord	inator		Module offered by	
chairpe	erson o	f examination committee	!	Faculty of Physics a	nd Astronomy
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)	
6	nume	rical grade			
Duratio	n	Module level	Other prerequisites	1	
1 seme	ster	undergraduate	Approval from exam	nination committee r	equired.
Conten	ts				
Current or stud			. Accredited academ	c achievements, e.g	in case of change of university
Intend	ed lear	ning outcomes			
sics of unders	the Ba tand th	chelor's programme. The	y have knowledge of luation methods nec	a current subdisciplies sary to acquire this	of a module of Experimental Phy- ne of Experimental Physics and s knowledge. They are able to
Course	<b>S</b> (type, i	number of weekly contact hours, l	language — if other than Ge	rman)	
V (3) +	R (1)				
		sessment (type, scope, langua ole for bonus)	ge — if other than German,	examination offered — if no	t every semester, information on whether
or oral pages) If a wri	examir or pres tten ex	nation in groups (groups o sentation/talk (approx. 30 amination was chosen as	of 2, approx. 30 minu o minutes). s method of assessm	ites per candidate) o ent, this may be cha	didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may in-

stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Allocation of places
Additional information

# Workload

180 h

# Teaching cycle



Module	e title	·			Abbreviation
Curren	t Topic	s in Experimental Physic	CS .		11-BXE8-152-m01
Module coordinator Module offered I					I.
chairpe	erson o	f examination committee	e	Faculty of Physics a	and Astronomy
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)	·
8	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	its				
Current or stud			s. Accredited academi	c achievements, e.g	in case of change of university
Intend	ed lear	ning outcomes			
<b>Course</b> V (4) +	R (2)	ubject-specific contexts and number of weekly contact hours,	language — if other than Ger	man)	ot every semester, information on whether
written or oral pages) If a writstead t of assenation Langua Allocat	exami examir or pres tten exake the essmen date at age of a	nation (approx. 90 to 120 nation in groups (groups sentation/talk (approx. 3 amination was chosen a form of an oral examination tis changed, the lecture the latest.	o minutes) or oral exa of 2, approx. 30 minus o minutes). s method of assessmention of one candidate r must inform student	mination of one can tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method weeks prior to the original exami
Worklo	ad				
240 h					
Teachi	ng cycl	e			



Module title Abbreviation						
Curren	t Topic	s in Theoretical Physic	5		11-BXT5-152-m01	
Module coordinator				Module offered by	offered by	
chairpe	erson o	f examination committe	ee	Faculty of Physics	and Astronomy	
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites	i		
1 seme	ster	undergraduate	Approval from exan	nination committee	required.	
Conten	ts					
Current study a			Accredited academic	achievements, e.g.	in case of change of university or	
Intend	ed lear	ning outcomes				
sics of Physics	the Ba s and h	chelor's programme. Th	ey have advanced spe	cialist knowledge o	of a module of Theoretical Phy- of a subdiscipline of Theoretical cquired methods to current pro-	
Course	<b>S</b> (type, r	number of weekly contact hour	s, language — if other than Ge	rman)		
V (2) +	R (2)					
		sessment (type, scope, lang ble for bonus)	uage — if other than German,	examination offered — if I	not every semester, information on whether	
or oral	examir		s of 2, approx. 30 minu		ndidate each (approx. 30 minutes or project report (approx. 8 to 10	

stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Allocation of places

Attocation of places

**Additional information** 

--

Workload

150 h

**Teaching cycle** 

--

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 

--



Andule coordinator hairperson of examination committee	11-BXT6-152-m01  Module offered by	
hairperson of examination committee	Module offered by	
, I		
	Faculty of Physics and Astronomy	
CCTS   Method of grading   Only after suc	cc. compl. of module(s)	
numerical grade		
Ouration Module level Other prerequ	uisites	
semester undergraduate Approval from	Approval from examination committee required.	
Contents		
Current topics of Theoretical Physics. Accredited acad tudy abroad.	lemic achievements, e.g. in case of change of university or	
ntended learning outcomes		
ics of the Bachelor's programme. They have advance	nding to the requirements of a module of Theoretical Phyed specialist knowledge of a subdiscipline of Theoretical ey are able to apply the acquired methods to current pro-	
<b>Courses</b> (type, number of weekly contact hours, language $-$ if other	than German)	
(3) + R (1)		
<b>Method of assessment</b> (type, scope, language — if other than Gnodule is creditable for bonus)	erman, examination offered $-$ if not every semester, information on whether	

pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

- 8 8 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
Allocation of places	
Additional information	

# Workload

180 h

# Teaching cycle



Modul	e title				Abbreviation
Curren	t Topic	s in Theoretical Physic	cs		11-BXT8-152-m01
Modul	e coord	linator		Module offered	by
chairpe	erson o	of examination commit	tee	Faculty of Physic	cs and Astronomy
ECTS	Meth	od of grading	Only after succ.	compl. of module(s)	
8	nume	erical grade			
Duratio	on	Module level	Other prerequisi	tes	
1 seme	ster	undergraduate	Approval from ex	camination committe	e required.
Conten	its	,	`		
Current study a			s. Accredited academ	nic achievements, e.	g. in case of change of university or
Intend	ed lear	ning outcomes			
sics of Physics blems	the Ba s and h of Theo	chelor's programme. T nave mastered the requ pretical Physics.	hey have advanced suired methods. They	specialist knowledge are able to apply the	ets of a module of Theoretical Phy- e of a subdiscipline of Theoretical e acquired methods to current pro-
		number of weekly contact hou	ırs, language — if other thar	n German)	
V (4) +					
		<b>sessment</b> (type, scope, lar ble for bonus)	nguage — if other than Germ	an, examination offered —	if not every semester, information on whether
or oral	examiı		os of 2, approx. 30 m		andidate each (approx. 30 minute e) or project report (approx. 8 to 10

stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami-

nation date at the latest. Language of assessment: German and/or English

## **Allocation of places**

## **Additional information**

# Workload

240 h

# Teaching cycle



Module	Module title Abbreviation				
Selected Topics in Astrophysics					11-CSA6-152-m01
Module coordinator				Module offered by	
chairpe	rson of	examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	d of grading	Only after succ. com	ıpl. of module(s)	
6	numer	rical grade			
Duratio	n	Module level	Other prerequisites		
1 semes	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	ts				
Selecte	d topic	s of Astrophysics.			
Intende	ed learn	ing outcomes			
tion me	thods r				stand the measuring and evalua- subject-specific contexts and
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)	
V (3) + I	R (1)				
			ge — if other than German, e	examination offered — if no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocati	ion of p	laces			
Additional information					
Workload					
180 h					
Teaching cycle					
Referre	d to in	LPO I (examination regulations	for teaching-degree progra	mmes)	



Module	Module title Abbreviation				
Selecte	Selected Topics in Solid State Physics 11-CSF6-152-mo1				
Module	Module coordinator			Module offered by	
chairpe	erson o	f examination committee	!	Faculty of Physics a	nd Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
6	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	ts				
Selecte	d topic	s of Solid-State Physics.			
Intende	ed lear	ning outcomes			
and eva	aluatio				nd understand the measuring classify the subject-specific con-
Course	<b>S</b> (type, r	number of weekly contact hours,	anguage — if other than Ger	rman)	
V (3) +	R (1)				
			ge — if other than German,	examination offered — if no	t every semester, information on whether
or oral pages) If a writ stead t of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English				
Allocat	ion of p	olaces			
Additio	Additional information				
Workload					
180 h					
Teaching cycle					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)				



Module	Module title Abbreviation				
Selecte	Selected Topics in Particle Physics 11-CST6-152-mo1				
Module	Module coordinator			Module offered by	
chairpe	erson o	f examination committee	!	Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
6	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	ts				
Selecte	d topic	cs of Particle Physics.			
Intende	ed learı	ning outcomes			
theoret	ical me				sics and of the experimental or sify the subject-specific contexts
Course	<b>S</b> (type, r	number of weekly contact hours,	anguage — if other than Ger	rman)	
V (3) +	R (1)				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether
or oral pages) If a writ stead t of asse nation	examin or pres tten exa ake the ssmen date at	nation in groups (groups sentation/talk (approx. 3 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). s method of assessmo tion of one candidate must inform student	tes per candidate) o ent, this may be char e each or an oral exa	didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method weeks prior to the original exami-
Allocat					
Additio	nal inf	ormation			
Workload					
180 h					
Teaching cycle					
<b>~ /</b>					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)				
Control of the contro					



Module	Module title Abbreviation				
Selecte	Selected Topics in Theoretical Physics 11-CSTh6-152-mo1				
Module	coord	inator		Module offered by	
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)	
6	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	ts				
Selecte	d topic	s of Theoretical Physics.			
Intende	ed lear	ning outcomes			
					have mastered the necessary problems of Theoretical Physics.
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)	
V (3) +	R (1)				
			ge — if other than German, o	examination offered — if no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocat	ion of p	olaces			
Additional information					
Workload					
180 h					
Teaching cycle					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)				



# Winter Term 2020

(o ECTS credits)



					T
	Module title Abbreviation				
Curren	t Topic	s in Experimental Physic	5		11-BXE5-152-m01
Module	e coord	inator		Module offered by	
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	its				
Current or stud	•		. Accredited academi	c achievements, e.g	. in case of change of university
Intend	ed lear	ning outcomes			
classif	y the su s (type, r	ubject-specific contexts a	nd know the applicat	ion areas.	s knowledge. They are able to
		sessment (type, scope, langua	ge — if other than German.	examination offered — if no	ot every semester, information on whether
		ole for bonus)	,		,
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
<del></del>					
Additional information					
Workload					
150 h					

**Teaching cycle** 



Modul	e title				Abbreviation
Current Topics in Experimental Physics 11-BXE6-152-mo1					11-BXE6-152-m01
Modul	e coord	linator		Module offered by	·
chairp	erson o	f examination committee		Faculty of Physics	and Astronomy
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)	
6	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee	required.
Conter	its				
	t topics ly abro	•	. Accredited academi	c achievements, e.g	g. in case of change of university
Intend	ed lear	ning outcomes			
sics of unders	the Ba tand th	chelor's programme. The	y have knowledge of luation methods nece	a current subdiscip essary to acquire thi	of a module of Experimental Phyline of Experimental Physics and sknowledge. They are able to
Course	S (type,	number of weekly contact hours,	language — if other than Ge	rman)	
V (3) + R (1)					
	<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)				
	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the metho				

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami-

nation date at the latest. Language of assessment: German and/or English

Allocation of places

**Additional information** 

180 h

Workload

**Teaching cycle** 



Module	Module title Abbreviation				
Current Topics in Experimental Physics 11-BXE8-152-mo1					
	Module coordinator			Madula offered by	
	_			Module offered by	and Antonomous
		of examination committee		Faculty of Physics a	and Astronomy
ECTS		od of grading	Only after succ. con	ipi. or module(s)	
8		erical grade	041		
Duratio		Module level	Other prerequisites		• 1
1 seme		undergraduate	Approval from exam	ination committee r	equired.
Curren		of Experimental Physics	Accredited academi	c achievements e g	. in case of change of university
or stud	•		. Accreated academi	e acmevements, e.g	. In case of change of aniversity
Intend	ed lear	ning outcomes			
Course V (4) +	y the su s (type, I R (2)	ubject-specific contexts a	nd know the applicat anguage — if other than Gei	ion areas.	s knowledge. They are able to
			ge — if other than German,	examination offered — if no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
<del></del>					
Additional information					
Workload					
240 h					
Teaching cycle					



					T
Modul	e title			Abbreviation	
Curren	Current Topics in Theoretical Physics				11-BXT5-152-m01
Modul	e coord	inator		Module offered by	
chairp	erson o	f examination committee	e	Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites	i	
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.
Conter	ıts				
	t topics abroad.		Accredited academic	achievements, e.g. i	n case of change of university or
Intend	ed lear	ning outcomes			
Physic blems	s and h of Theo	ave mastered the requireretical Physics.	ed methods. They are	able to apply the ac	a subdiscipline of Theoretical equired methods to current pro-
V (2) +		number of weekly contact hours,	language — If other than Ge	rman)	
		coccmont (time asses leaves	if athematican Common	ititi	ot every semester, information on whether
			age — II other than German,	exammation onered — ii no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
Additional information					

150 h

Workload

### Teaching cycle

--

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 

--



Module	e title				Abbreviation	
Curren	t Topic	s in Theoretical Physics			11-BXT6-152-m01	
Module	e coord	inator		Module offered by	l	
chairpe	erson o	f examination committee	2	Faculty of Physics a	and Astronomy	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
6	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	Approval from examination committee required.		
Conten	its					
	t topics abroad.		Accredited academic	achievements, e.g. i	n case of change of university or	
Intend	ed lear	ning outcomes				
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.						
Course	<b>S</b> (type, 1	number of weekly contact hours,	language — if other than Ge	rman)		
V (3) + R (1)						
		<b>sessment</b> (type, scope, languable for bonus)	age — if other than German,	examination offered — if no	ot every semester, information on whether	
written examination (approx, on to 120 minutes) or oral examination of one candidate each (approx, 20 minutes						

written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Allocation	of	places

Additional information

Workload

180 h

**Teaching cycle** 

--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

--



Module	e title			Abbreviation		
Current	t Topic	s in Theoretical Phys	ics	11-BXT8-152-mo	1	
Module	e coord	linator		Module offered by		
chairpe	erson o	of examination comm	ittee	Faculty of Physics and Astronomy		
ECTS	Meth	od of grading	Only after succ. co	npl. of module(s)		
8	nume	rical grade				
Duratio	n	Module level	Other prerequisites	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	Approval from examination committee required.		
Conten	ts					
Current study a			cs. Accredited academic	achievements, e.g. in case of change	of university or	
Intende	ed lear	ning outcomes				
sics of Physics	the Ba s and h	chelor's programme.	They have advanced spe	to the requirements of a module of The cialist knowledge of a subdiscipline of able to apply the acquired methods	of Theoretical	
Course	<b>S</b> (type, i	number of weekly contact ho	ours, language — if other than Ge	rman)		
V (4) + R (2)						
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)						
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10						

or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

0 0	<u> </u>
Allocation of places	
Additional information	
Workload	

Teaching cycle

240 h



Module title Abbreviation						
Selected Topics in Astrophysics					11-CSA6-152-m01	
Module coordinator				Module offered by		
chairpe	rson of	examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	d of grading	Only after succ. com	ıpl. of module(s)		
6	numer	rical grade				
Duratio	n	Module level	Other prerequisites			
1 semes	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Selecte	d topic	s of Astrophysics.				
Intende	ed learn	ing outcomes				
tion me	thods r				stand the measuring and evalua- subject-specific contexts and	
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)		
V (3) + I	R (1)					
		<b>essment</b> (type, scope, langua le for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether	
or oral or pages) If a writ stead to of assention or	examin or pres ten exa ake the ssment date at	ation in groups (groups of entation/talk (approx. 30 amination was chosen as form of an oral examina	of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Allocati	ion of p	laces				
Additio	nal info	ormation				
Workload						
180 h						
Teachir	ng cycle	e				
Referred to in LPO I (examination regulations for teaching-degree programmes)						



Module title Abbreviation							
Selected Topics in Solid State Physics 11-CSF6-152-mo1					11-CSF6-152-m01		
Module coordinator				Module offered by	I.		
chairp	erson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
6	nume	rical grade					
Durati	on	Module level	Other prerequisites				
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.		
Conte	nts						
Select	ed topio	cs of Solid-State Physics.	,				
Intend	ed lear	ning outcomes					
and ev	aluatio				nd understand the measuring classify the subject-specific con-		
Course	<b>es</b> (type, r	number of weekly contact hours, I	anguage — if other than Ger	rman)			
V (3) +	R (1)						
		sessment (type, scope, langua ble for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether		
or oral pages) If a wri stead to of asse nation	examir or pres tten exa take the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as the form of an oral examina	of 2, approx. 30 minu o minutes). o method of assessmo tion of one candidate o must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may institution in groups. If the method weeks prior to the original exami-		
Alloca	tion of <sub>l</sub>	olaces					
Additio	onal inf	ormation					
Worklo	Workload						
180 h							
Teachi	ng cycl	e					
	,						
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)			
	(examination regulations for teaching-degree programmes)						



Module	Module title Abbreviation						
Selecte	Selected Topics in Particle Physics 11-CST6-152-mo1						
Module coordinator Module offered by							
chairpe	erson o	f examination committee	!	Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. con		,		
6		rical grade		•			
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.		
Conten	ts						
Selecte	d topic	s of Particle Physics.					
Intende	ed lear	ning outcomes					
theoret	ical me				sics and of the experimental or sify the subject-specific contexts		
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)			
V (3) +	R (1)						
		sessment (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether		
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
180 h							
Teachi	ng cycl	e					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						



Module	Module title Abbreviation						
Selecte	Selected Topics in Theoretical Physics 11-CSTh6-152-mo1						
Module coordinator Module offered by							
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)			
6	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.		
Conten	ts						
Selecte	d topic	s of Theoretical Physics.					
Intende	ed lear	ning outcomes					
					have mastered the necessary problems of Theoretical Physics.		
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)			
V (3) +	R (1)						
			ge — if other than German, o	examination offered — if no	ot every semester, information on whether		
or oral pages) If a writ stead to of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Workload							
180 h	180 h						
Teachi	ng cycl	e					
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)			



# **Summer Term 2021**

(o ECTS credits)



Module title Abbreviation							
Current Topics	Current Topics in Experimental Physics 11-BXE5-152-mo1						
Module coordi	nator		Module offered by	<u></u>			
chairperson of	examination committee		Faculty of Physics a	and Astronomy			
ECTS Metho	d of grading	Only after succ. com	pl. of module(s)				
5 numeri	ical grade						
Duration	Module level	Other prerequisites					
1 semester	undergraduate	Approval from exam	ination committee r	equired.			
Contents							
Current topics or study abroad		. Accredited academi	c achievements, e.g.	. in case of change of university			
Intended learn	ing outcomes						
Courses (type, nu	e measuring and/or eval oject-specific contexts a umber of weekly contact hours, l	nd know the applicat	ion areas.	s knowledge. They are able to			
V (2) + R (2)							
Method of assemodule is creditable		ge — if other than German, e	examination offered — if no	ot every semester, information on whether			
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Allocation of places							
Additional information							
Workload							
150 h							
Teaching cycle							



Module title Abbreviation							
Current Topics in Experimental Physic	CS		11-BXE6-152-m01				
Module coordinator		Module offered by					
chairperson of examination committee	e	Faculty of Physics a	nd Astronomy				
ECTS Method of grading	Only after succ. con	npl. of module(s)					
6 numerical grade							
Duration Module level	Other prerequisites	i					
ı semester undergraduate	Approval from exam	ination committee re	equired.				
Contents							
Current topics of Experimental Physics or study abroad.	s. Accredited academi	c achievements, e.g.	in case of change of university				
Intended learning outcomes							
The students have advanced compete sics of the Bachelor's programme. The understand the measuring and/or evaclassify the subject-specific contexts a Courses (type, number of weekly contact hours,	ey have knowledge of Iluation methods nece and know the applica	a current subdisciplingssary to acquire this tion areas.	ne of Experimental Physics and				
V (3) + R (1)							
Method of assessment (type, scope, langu module is creditable for bonus)	age — if other than German,	examination offered — if no	t every semester, information on whether				
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
	l/or Fnglish						

**Additional information** 

Workload

180 h

**Teaching cycle** 



Module	Module title Abbreviation						
Current	Current Topics in Experimental Physics 11-BXE8-152-mo1						
Module	coord	inator		Module offered by	,		
chairpe	rson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Meth	od of grading	Only after succ. con	ıpl. of module(s)			
8	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	ination committee re	equired.		
Conten	ts						
Current or stud			. Accredited academi	c achievements, e.g.	. in case of change of university		
Intende	ed lear	ning outcomes					
unders classify	tand th		luation methods nece and know the applicat	essary to acquire this ion areas.	ne of Experimental Physics and sknowledge. They are able to		
V (4) +		iumber of weekly contact flours,	language — ii other than Ger	man)			
Method	d of ass		age — if other than German,	examination offered — if no	ot every semester, information on whether		
or oral pages) If a writ stead to of asse	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocat	Allocation of places						
Additio	Additional information						
Worklo	ad		_				
240 h							
Teachi	ng cycl	e					



	_		O (NEW TOWN)	000,50			
Modul	Module title Abbreviation						
Curren	t Topic	s in Theoretical Physics			11-BXT5-152-m01		
Modul	e coord	inator		Module offered by			
chairpe	erson o	f examination committee	9	Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.		
Conten	nts						
	t topics abroad.	of Theoretical Physics. <i>F</i>	Accredited academic	achievements, e.g. i	n case of change of university or		
Intend	ed lear	ning outcomes					
Physics blems Course	s and h of Theo es (type, r		ed methods. They are	able to apply the ac	f a subdiscipline of Theoretical equired methods to current pro-		
V (2) +	R (2)						
		sessment (type, scope, langua le for bonus)	age — if other than German,	examination offered — if no	ot every semester, information on whether		
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Allocat	tion of p	olaces					
Additio	onal inf	ormation					
	<del></del>						

Workload 150 h

**Teaching cycle** 



Module title					Abbreviation	
Current Topics in Theoretical Physics 11-BXT6-152-mo1					11-BXT6-152-m01	
Module coordinator Module offered by						
chairperson of examination committee			ittee	Faculty of Physics and Astronomy		
ECTS	Meth	od of grading	Only after succ. cor	Only after succ. compl. of module(s)		
6	nume	rical grade				
Duratio	on	Module level	Other prerequisites	5		
1 seme	ester	undergraduate	Approval from exan	nination committee r	equired.	
Contents						
Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad.						

#### **Intended learning outcomes**

The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.

Courses (type, number of weekly contact hours, language - if other than German)

V(3) + R(1)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

#### Allocation of places

--

#### **Additional information**

--

#### Workload

180 h

#### **Teaching cycle**

--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

--



Modul	e title			Abbreviation		
Current Topics in Theoretical Physics				11-BXT8-152-m01		
Module coordinator				Module offered by		
hairpe	erson of	examination committee	Э	Faculty of Physics and Astronomy		
CTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
3	numei	rical grade				
uratio	on	Module level	Other prerequisites			
seme	ster	undergraduate	Approval from exam	nination committee required.		
onten	its					
tudy a	broad.	or ineoretical Physics. A	Accredited academic :	achievements, e.g. in case of change of university o		
ics of Physics	the Bac s and h	helor's programme. The	y have advanced spe	to the requirements of a module of Theoretical Phy- cialist knowledge of a subdiscipline of Theoretical able to apply the acquired methods to current pro-		
Course	<b>S</b> (type, n	umber of weekly contact hours,	language — if other than Ge	rman)		
V (4) + R (2)						
(7)		<b>essment</b> (type, scope, langualle for bonus)	age — if other than German,	examination offered $-$ if not every semester, information on whethe		
<b>∕</b> letho	s creditab					

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami-

Language of assessment: German and/or English

		- •		
ΛII	000	tion	ot n	laces
Λu	uca	LIVII	יט וט	laces

#### **Additional information**

nation date at the latest.

#### Workload

240 h

#### Teaching cycle



Module	Module title Abbreviation					
Selecte	Selected Topics in Astrophysics 11-CSA6-152-mo1					
Module	coord	inator		Module offered by		
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Selecte	d topic	s of Astrophysics.				
Intende	ed lear	ning outcomes				
tion me	ethods				stand the measuring and evalua- subject-specific contexts and	
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)		
V (3) +	R (1)					
			ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	Workload					
180 h			,			
Teachi	ng cycl	е				
	,					
Referred to in LPO I (examination regulations for teaching-degree programmes)						



Modul	e title			Abbreviation	
Select	ed Topi	cs in Solid State Physics			11-CSF6-152-m01
Module coordinator				Module offered by	
chairp	erson o	f examination committee	!	Faculty of Physics a	and Astronomy
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)	
6					
Duratio	on	Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	ination committee r	required.
Conter	nts		•		
Selecte	ed topio	cs of Solid-State Physics.			
Intend	ed lear	ning outcomes			
and ev	aluatio				and understand the measuring classify the subject-specific con-
Course	<b>es</b> (type, r	number of weekly contact hours,	anguage — if other than Ger	rman)	
V (3) +	R (1)				
		sessment (type, scope, langua ble for bonus)	ge — if other than German, o	examination offered — if n	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					or project report (approx. 8 to 10 inged and assessment may inamination in groups. If the method
Alloca	tion of <sub> </sub>	places			
Additio	onal inf	ormation			
Workload					
180 h					
Teachi	ng cycl	e			
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)	
Received to III at 10 1 (examination regulations for teaching degree programmes)					



Module	Module title Abbreviation				
Selecte	ed Topi	cs in Particle Physics			11-CST6-152-m01
Module	Module coordinator			Module offered by	
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
6	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	ts				
Selecte	d topic	cs of Particle Physics.			
Intende	ed learı	ning outcomes			
theoret	ical me				sics and of the experimental or sify the subject-specific contexts
Course	<b>S</b> (type, r	number of weekly contact hours,	anguage — if other than Ger	rman)	
V (3) +	R (1)				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether
or oral pages) If a writ stead t of asse nation	examin or pres tten exa ake the ssmen date at	nation in groups (groups sentation/talk (approx. 3 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). s method of assessmo tion of one candidate must inform student	tes per candidate) o ent, this may be char e each or an oral exa	didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method weeks prior to the original exami-
Allocat					
Additio	nal inf	ormation			
Workload					
180 h					
Teachi	ng cycl	e			
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)	
	Refer to the ET OF (examination regulations for teaching degree programmes)				



Module title Abbreviation					
Selected Topi	cs in Theoretical Physics	i		11-CSTh6-152-m01	
Module coord	inator		Module offered by		
chairperson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS Metho	od of grading	Only after succ. con	ıpl. of module(s)		
6 nume	rical grade				
Duration	Module level	Other prerequisites			
1 semester	undergraduate	Approval from exam	ination committee r	equired.	
Contents					
Selected topic	cs of Theoretical Physics.				
Intended lear	ning outcomes				
				have mastered the necessary problems of Theoretical Physics.	
Courses (type, r	number of weekly contact hours, I	anguage — if other than Ger	man)		
V (3) + R (1)					
Method of ass		ge — if other than German,	examination offered — if no	ot every semester, information on whether	
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of	places				
Additional information					
Workload					
180 h					
Teaching cycl	e				
Referred to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		



# Winter Term 2021

(o ECTS credits)



Module title					Abbreviation
Current Topics in Experimental Physics					11-BXE5-152-m01
Module	coord	inator		Module offered by	, , , , , , , , , , , , , , , , , , ,
chairpe	rson o	f examination committed	e	Faculty of Physics	and Astronomy
ECTS	Metho	od of grading	Only after succ. cor	npl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites	<b>.</b>	
1 semes	ster	undergraduate	Approval from exam	nination committee	required.
Content	ts				
Current or study			s. Accredited academ	ic achievements, e.	g. in case of change of university
Intende	d lear	ning outcomes			
		chelor's programme. The	ey have knowledge of	a current subdiscip	of a module of Experimental Phyline of Experimental Physics and
underst classify	tand th	chelor's programme. The ne measuring and/or eva nbject-specific contexts a	ey have knowledge of Iluation methods neco and know the applica	a current subdiscip essary to acquire thi tion areas.	
underst classify	tand the su the su (type, r	chelor's programme. The ne measuring and/or eva	ey have knowledge of Iluation methods neco and know the applica	a current subdiscip essary to acquire thi tion areas.	line of Experimental Physics and
underst classify <b>Courses</b> V (2) + F <b>Method</b>	tand the sus (type, reference)  R (2)  I of ass	chelor's programme. The ne measuring and/or eva ubject-specific contexts a number of weekly contact hours,	ey have knowledge of Iluation methods nec and know the applica language — if other than Ge	a current subdiscip essary to acquire thi tion areas.	line of Experimental Physics and
underst classify  Courses  V (2) + F  Method module is written or oral e pages) of lf a writt stead ta of assess nation of line or oral expension or	tand the surface the surface to the surface to the surface ten examinate the same ten examinate the same the same the same that at	chelor's programme. The permeasuring and/or evaluable to specific contexts and the permeasuring and/or evaluable for bonus.  The permeasuring and/or evaluable for bonus.  The permeasure of weekly contact hours, and the for bonus.  The permeasure of the permeasure	ey have knowledge of aluation methods neces and know the application language — if other than Geman, o minutes) or oral exact of 2, approx. 30 minutes) is method of assessmation of one candidates must inform students.	a current subdiscip essary to acquire this tion areas.  rman)  examination offered — if r umination of one car utes per candidate) ent, this may be cha e each or an oral exa	line of Experimental Physics and is knowledge. They are able to not every semester, information on whether andidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may in-
underst classify  Courses  V (2) + F  Method module is written or oral e pages) of lf a writt stead ta of assess nation of line or oral expension or	tand the stand the the stand the sta	chelor's programme. The remeasuring and/or evaluable to specific contexts and biject-specific contexts	ey have knowledge of aluation methods neces and know the application language — if other than Geman, o minutes) or oral exact of 2, approx. 30 minutes) is method of assessmation of one candidates must inform students.	a current subdiscip essary to acquire this tion areas.  rman)  examination offered — if r umination of one car utes per candidate) ent, this may be cha e each or an oral exa	line of Experimental Physics and is knowledge. They are able to not every semester, information on whether andidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may inamination in groups. If the method
underst classify  Courses  V (2) + F  Method module is  written or oral e pages) of a writt stead ta of assess nation of Language	tand the surface of a creditable examine exami	chelor's programme. The remeasuring and/or evaluable to specific contexts and biject-specific contexts	ey have knowledge of aluation methods neces and know the application language — if other than Geman, o minutes) or oral exact of 2, approx. 30 minutes) is method of assessmation of one candidates must inform students.	a current subdiscip essary to acquire this tion areas.  rman)  examination offered — if r umination of one car utes per candidate) ent, this may be cha e each or an oral exa	line of Experimental Physics and is knowledge. They are able to not every semester, information on whether andidate each (approx. 30 minutes) or project report (approx. 8 to 10 anged and assessment may inamination in groups. If the method

--

### Workload

150 h

### **Teaching cycle**

--

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 

--



	M. 1.1. (2)				
Module					Abbreviation
Current Topics in Experimental Physics			5		11-BXE6-152-m01
Module	e coord	inator		Module offered by	
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
6	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	its				
Current or stud	•		. Accredited academi	c achievements, e.g	. in case of change of university
Intend	ed lear	ning outcomes			
classif	y the su s (type, r	ubject-specific contexts a	nd know the applicat	ion areas.	s knowledge. They are able to
		SASSMANT (type scope langua	ge — if other than German	evamination offered — if no	ot every semester, information on whether
		ole for bonus)	ge in other than derman,	examination offered if the	st every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
<del></del>					
Additional information					
Worklo	ad				
180 h					

**Teaching cycle** 



WÜRZBURG Physics					
Module title Abbreviation					Abbreviation
Current Topics in Experimental Physics					11-BXE8-152-mo1
Module coordinator				Module offered by	
chairpe	erson o	f examination committee	2	Faculty of Physics a	and Astronomy
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)	
8	nume	rical grade			
Duratio	on	Module level	Other prerequisites	1	
1 seme	ster	undergraduate	Approval from exam	nination committee re	equired.
Conten	ıts				
Curren			. Accredited academi	ic achievements, e.g.	. in case of change of university
Intend	ed lear	ning outcomes			
sics of unders	the Ba stand th	chelor's programme. The	y have knowledge of luation methods nec	a current subdiscipli essary to acquire this	of a module of Experimental Phy- ine of Experimental Physics and s knowledge. They are able to
Course	S (type, i	number of weekly contact hours,	language — if other than Ge	rman)	
V (4) +	R (2)				
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)					
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).					
stead t	ake the	e form of an oral examina	tion of one candidate	e each or an oral exa	nged and assessment may in- mination in groups. If the methoo weeks prior to the original exami

nation date at the latest. Language of assessment: German and/or English

#### Allocation of places

#### **Additional information**

#### Workload

240 h

#### **Teaching cycle**



Module title					Abbreviation
Current	t Topic	s in Theoretical Phys	sics		11-BXT5-152-m01
Module	e coord	linator		Module of	fered by
chairpe	erson o	f examination comm	ittee	Faculty of I	Physics and Astronomy
ECTS	Meth	od of grading	Only after succ	. compl. of modu	ıle(s)
5	nume	rical grade			
Duratio	n	Module level	Other prerequi	sites	
1 seme	ster	undergraduate	Approval from	examination com	nmittee required.
Conten	ts				
Current study a			cs. Accredited acade	emic achievemen	ts, e.g. in case of change of university o
Intende	ed lear	ning outcomes			
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.					
Course	<b>S</b> (type, i	number of weekly contact h	ours, language — if other th	an German)	
V(2) + R(2)					
		<b>sessment</b> (type, scope, l ble for bonus)	anguage — if other than Ge	rman, examination off	$\operatorname{ered} - \operatorname{if}$ not every semester, information on whethe
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).					

pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Language of assessment. German ana/or English
Allocation of places
Additional information
Workload

Teaching cycle

150 h



Module title					Abbreviation
Curren	t Topic	s in Theoretical Physi	ics		11-BXT6-152-m01
Module	e coord	linator		Module of	fered by
chairpe	erson o	of examination commi	ttee	Faculty of	Physics and Astronomy
ECTS	Meth	od of grading	Only after succ.	compl. of mode	ule(s)
6	nume	erical grade			
Duratio	on	Module level	Other prerequis	ites	
1 seme	ster	undergraduate	Approval from e	xamination con	nmittee required.
Conten	ıts				
Current study a	•	,	s. Accredited acader	nic achievemer	nts, e.g. in case of change of university o
Intend	ed lear	ning outcomes			
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.					
		number of weekly contact ho	urs, language — if other tha	n German)	
V (3) + R (1)					
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)					
or oral	examiı		ips of 2, approx. 30 n		one candidate each (approx. 30 minute didate) or project report (approx. 8 to 10

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Allocation of places		
Additional information		

Workload

180 h

Teaching cycle



Module	title			Abbreviation	
Current Topics in Theoretical Physics 11-BXT8-152-mo1					
Module	coord	linator		Module offered by	
chairpe	erson o	f examination comm	ittee	Faculty of Physics and Astronomy	
ECTS	Meth	od of grading	Only after succ. co	mpl. of module(s)	
8	nume	rical grade			
Duratio	n	Module level	Other prerequisites	5	
1 seme	ster	undergraduate	Approval from exan	nination committee required.	
Conten	ts				
Current study a			cs. Accredited academic	achievements, e.g. in case of change of university of	
Intende	ed lear	ning outcomes			
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.					
Courses (type, number of weekly contact hours, language — if other than German)					
V(4) + R(2)					
		<b>sessment</b> (type, scope, la ble for bonus)	anguage — if other than German,	examination offered $-$ if not every semester, information on whether	
or oral	examir	nation in groups (grou		amination of one candidate each (approx. 30 minut utes per candidate) or project report (approx. 8 to 1	

pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Allocation of places	
Additional information	
Workload	

Teaching cycle

240 h



Module	title		Abbreviation					
Selecte	d Topics in Astrophysics			11-CSA6-152-mo1				
Module	coordinator		Module offered by					
chairpe	rson of examination comm	nittee	Faculty of Physics and Astronomy					
ECTS	Method of grading	Only after succ. con	pl. of module(s)					
6	numerical grade							
Duratio	n Module level	Other prerequisites						
1 semes	ster undergraduate	Approval from exam	Approval from examination committee required.					
Content	ts	,						
Selecte	d topics of Astrophysics.	,						
Intende	ed learning outcomes							
The students have basic knowledge of a current field of Astrophysics and understand the measuring and evaluation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.								
Courses	<b>S</b> (type, number of weekly contact l	nours, language — if other than Ge	rman)					
V (3) + F	R (1)							
	l of assessment (type, scope, creditable for bonus)	language — if other than German,	examination offered — if no	ot every semester, information on whether				
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English								
Allocation of places								
Additio	nal information							
Workload								
180 h								
Teaching cycle								
<del></del>								
Referre	d to in LPO I (examination reg	ulations for teaching-degree progra	ımmes)					



Module	e title		Abbreviation				
Selecte	ed Topi	cs in Solid State Physics		11-CSF6-152-m01			
Module coordinator				Module offered by			
chairperson of examination committee				Faculty of Physics and Astronomy			
ECTS	· [			mpl. of module(s)			
6	nume	rical grade					
Duration Module level		Other prerequisites					
1 semester		undergraduate	Approval from examination committee required.				
Conten	its						
Selecte	ed topic	s of Solid-State Physics.					
Intend	ed learı	ning outcomes					
The students have basic knowledge of a specialist field of Solid-State Physics and understand the measuring and evaluation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.							
Course	<b>S</b> (type, n	umber of weekly contact hours, l	anguage — if other than Ger	man)			
V (3) +	R (1)						
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)							
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Allocation of places							
Additional information							
Workload							
180 h							
Teaching cycle							
<del></del>							
Referred to in LPO I (examination regulations for teaching-degree programmes)							



Modul	e title	,	Abbreviation				
Selecte	ed Topi	cs in Particle Physics		11-CST6-152-m01			
Module coordinator				Module offered by			
chairperson of examination committee				Faculty of Physics and Astronomy			
ECTS				mpl. of module(s)			
6	nume	rical grade					
Duration Module level		Module level	Other prerequisites				
1 semester		undergraduate	Approval from examination committee required.				
Conten	its						
Selecte	ed topic	s of Particle Physics.					
Intend	ed learı	ning outcomes					
The students have basic knowledge of a special field of Elementary Particle Physics and of the experimental or theoretical methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.							
Course	<b>S</b> (type, n	number of weekly contact hours, l	anguage — if other than Ger	man)			
V (3) +	R (1)						
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)							
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Allocation of places							
Additional information							
Workload							
180 h							
Teaching cycle							
<del></del>							
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						



Module title Abbreviation					
Selected Topi	cs in Theoretical Physics	i		11-CSTh6-152-m01	
Module coord	inator		Module offered by		
chairperson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS Metho	od of grading	Only after succ. con	ıpl. of module(s)		
6 nume	rical grade				
Duration	Module level	Other prerequisites			
1 semester	undergraduate	Approval from exam	ination committee r	equired.	
Contents					
Selected topic	cs of Theoretical Physics.				
Intended lear	ning outcomes				
				have mastered the necessary problems of Theoretical Physics.	
Courses (type, r	number of weekly contact hours, I	anguage — if other than Ger	man)		
V (3) + R (1)					
Method of ass		ge — if other than German,	examination offered — if no	ot every semester, information on whether	
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of	places				
Additional inf	ormation				
<del></del>					
Workload					
180 h					
Teaching cycl	e				
Referred to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		



# **Summer Term 2022**

(o ECTS credits)



Module title					Abbreviation
Current	Topic	s in Experimental Ph	ysics		11-BXE5-152-m01
Module coordinator				Module offered by	-
chairpe	erson o	f examination comm	ittee	Faculty of Physics a	and Astronomy
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	nination committee r	equired.
Conten	ts				
Current or stud	•		sics. Accredited academ	ic achievements, e.g	, in case of change of university
Intend	ed lear	ning outcomes			
classify	the su	ubject-specific contex	evaluation methods need cts and know the applica ours, language — if other than Ge	tion areas.	s knowledge. They are able to
Metho	d of as	sessment (type, scope, la ble for bonus)	anguage — if other than German,	examination offered — if no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
Additional information					
Worklo	ad				
150 h					
Feaching cycle					



Module title					Abbreviation
Current Topics in Experimental Physics					11-BXE6-152-m01
Module	e coord	inator		Module offered by	-
chairpe	erson o	f examination commit	tee	Faculty of Physics a	and Astronomy
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)	
6	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	nination committee r	equired.
Conten	ts		`		
Current or stud	•		ics. Accredited academ	ic achievements, e.g	, in case of change of university
Intende	ed lear	ning outcomes			
classify	the su <b>s</b> (type, r	ubject-specific context	ts and know the applicaturs, language — if other than Ge	tion areas.	s knowledge. They are able to
		sessment (type, scope, landle for bonus)	nguage — if other than German,	examination offered — if no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
Additional information					
Workload					
180 h			,		
Teaching cycle					



	.*.1				A11
	Module title				Abbreviation
Curren	Current Topics in Experimental Physics				11-BXE8-152-m01
Modul	e coord	inator		Module offered by	
chairp	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
8	nume	rical grade			
Duration	on	Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	ination committee re	equired.
Conter	ıts				
	t topics ly abroa	,	. Accredited academi	c achievements, e.g.	. in case of change of university
Intend	ed lear	ning outcomes			
classif	y the su	e measuring and/or eval bject-specific contexts a number of weekly contact hours, l	nd know the applicat	ion areas.	s knowledge. They are able to
V (4) +	R (2)				
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
Additional information					
Worklo	oad				

240 h

Teaching cycle



Module title				Abbreviation		
Current	t Topic	s in Theoretical Physic	s	11-BXT5-152-m01		
Module	e coord	linator		Module offered by		
chairpe	erson o	f examination committ	ee	Faculty of Physics and Astronomy		
ECTS	Meth	od of grading	Only after succ. co	mpl. of module(s)		
5	nume	rical grade				
Duratio	on	Module level	Other prerequisite	Other prerequisites		
1 seme	ster	undergraduate	Approval from exar	n examination committee required.		
Conten	its					
	t topics abroad.	•	. Accredited academic	achievements, e.g. in case of change of university		
Intend	ed lear	ning outcomes				
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.						

 $\textbf{Courses} \ (\text{type, number of weekly contact hours, language} - \text{if other than German})$ 

V(2) + R(2)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

# **Allocation of places**

## **Additional information**

--

# Workload

150 h

# **Teaching cycle**

--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

--



Module title		Abbreviation			
Current Topics in Theoretical Physics			11-BXT6-152-m01		
Module coordinator		Module offered by			
chairperson of examination committee		Faculty of Physics a	and Astronomy		
ECTS Method of grading	Only after succ. con	npl. of module(s)			
6 numerical grade					
Duration Module level	Other prerequisites				
1 semester undergraduate	Approval from exam	ination committee r	equired.		
Contents					
Current topics of Theoretical Physics. <i>A</i> study abroad.	accredited academic	achievements, e.g. i	n case of change of university or		
Intended learning outcomes					
The students have advanced competer sics of the Bachelor's programme. The Physics and have mastered the require blems of Theoretical Physics.	y have advanced speed methods. They are	cialist knowledge of able to apply the ac	a subdiscipline of Theoretical		
<b>Courses</b> (type, number of weekly contact hours,	anguage — if other than Ger	rman)			
V (3) + R (1)					
<b>Method of assessment</b> (type, scope, langua module is creditable for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether		
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
<del></del>					
Additional information					
<del></del>					
Workload					
180 h					



Module title Abbreviation					
Current Topics in Theoretical Physics 11-BXT8-152-mo1					
Module	e coord	linator		Module offered by	
chairpe	erson o	of examination comm	ittee	Faculty of Physics and Astronomy	
ECTS	Meth	od of grading	Only after succ. cor	mpl. of module(s)	
8	nume	rical grade			
Duratio	n	Module level	Other prerequisites	5	
1 seme	ster	undergraduate	Approval from exan	ination committee required.	
Conten	ts				
Current study a			cs. Accredited academic	achievements, e.g. in case of change of university o	
Intende	ed lear	ning outcomes			
sics of Physics	the Ba s and h	chelor's programme.	They have advanced spe	to the requirements of a module of Theoretical Phy- ecialist knowledge of a subdiscipline of Theoretical e able to apply the acquired methods to current pro-	
Course	<b>S</b> (type,	number of weekly contact ho	ours, language — if other than Ge	erman)	
V (4) + R (2)					
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)					
				amination of one candidate each (approx. 30 minute utes per candidate) or project report (approx. 8 to 10	

pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

	······································
Allocation of places	
Additional information	
Workload	

**Teaching cycle** 

240 h

**Referred to in LPO I** (examination regulations for teaching-degree programmes)



Modul	Module title Abbreviation					
Select	ed Topi	cs in Astrophysics			11-CSA6-152-m01	
Modul	e coord	inator		Module offered by		
chairp	erson o	f examination committee	!	Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
6	nume	rical grade				
Durati	on	Module level	Other prerequisites			
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.	
Conter	nts					
Select	ed topio	cs of Astrophysics.				
Intend	ed lear	ning outcomes				
tion m	ethods				stand the measuring and evalua- subject-specific contexts and	
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)		
V (3) +	R (1)					
		sessment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether	
or oral pages) If a wri stead to of asse nation	examir or pres tten exa take the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). s method of assessmo tion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Alloca	tion of p	olaces				
Additio	onal inf	ormation				
Worklo	oad					
180 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	immes)		



Module	Module title Abbreviation					
Selecte	ed Topi	cs in Solid State Physics			11-CSF6-152-m01	
Module	e coord	inator		Module offered by		
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)	·	
6	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts		•			
Selecte	ed topic	s of Solid-State Physics.				
Intend	ed lear	ning outcomes				
and ev	aluatio				nd understand the measuring classify the subject-specific con-	
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)		
V (3) +	R (1)					
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
or oral pages) If a writ stead t of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	Workload					
180 h	180 h					
Teachi	ng cycl	e				
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					



Module	Module title Abbreviation					
Selecte	ed Topi	cs in Particle Physics			11-CST6-152-m01	
Module	coord	inator		Module offered by		
	_	f examination committee		Faculty of Physics a	and Astronomy	
ECTS		od of grading	Only after succ. con		······	
6		rical grade				
Duratio	•	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Selecte	d topic	cs of Particle Physics.				
Intende	ed learı	ning outcomes				
theoret	ical me				sics and of the experimental or sify the subject-specific contexts	
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Gei	man)		
V (3) +	R (1)					
		sessment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether	
or oral pages) If a writ stead t of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
180 h	180 h					
Teachi	ng cycl	e				
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					



Module title Abbreviation					Abbreviation	
Selecte	ed Topi	cs in Theoretical Physics	;		11-CSTh6-152-m01	
Module	coord	inator		Module offered by		
chairpe	erson o	f examination committee	!	Faculty of Physics a	and Astronomy	
ECTS	Meth	od of grading	Only after succ. con	ipl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Selecte	d topic	cs of Theoretical Physics.				
Intend	ed lear	ning outcomes				
					have mastered the necessary problems of Theoretical Physics.	
Course	<b>S</b> (type, r	number of weekly contact hours,	anguage — if other than Ger	man)		
V (3) +	R (1)					
		<b>Sessment</b> (type, scope, langua ole for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether	
or oral pages) If a writ stead t of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocat	ion of <sub>l</sub>	places				
	,					
Additio	nal inf	ormation				
Worklo	ad					
180 h						
Teachi	ng cycl	e				
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		



# Winter Term 2022

(o ECTS credits)



					T
Module					Abbreviation
Curren	t Topic	s in Experimental Physic	5		11-BXE5-152-m01
Module	e coord	inator		Module offered by	
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	its				
Current or stud	•		. Accredited academi	c achievements, e.g	. in case of change of university
Intend	ed lear	ning outcomes			
classif	y the su s (type, r	ubject-specific contexts a	nd know the applicat	ion areas.	s knowledge. They are able to
		sessment (type, scope, langua	ge — if other than German.	examination offered — if no	ot every semester, information on whether
		ole for bonus)	,		,
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocation of places					
Additio	onal inf	ormation			
Worklo	ad				
150 h					



		\.\\\ -				
Module title					Abbreviation	
Current	t Topics	s in Experimental Physic	5		11-BXE6-152-m01	
Module	coord	inator		Module offered by		
chairpe	rson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Current or stud			. Accredited academi	c achievements, e.g.	. in case of change of university	
Intende	ed lear	ning outcomes				
sics of unders classify	the Bac tand th the su	chelor's programme. The e measuring and/or eval bject-specific contexts a	y have knowledge of uation methods nece nd know the applicat	a current subdiscipli essary to acquire this ion areas.	of a module of Experimental Phy- ine of Experimental Physics and s knowledge. They are able to	
		number of weekly contact hours, l	anguage — if other than Gei	man)		
V (3) +						
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether	
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocation of places						
Additio	nal inf	ormation				
Worklo	ad					
180 h	180 h					



A4 - J-1	- 4:41 -				ALL	
Modul					Abbreviation	
Curren	Current Topics in Experimental Physics 11-BXE8-152-mo1					
Modul	e coord	inator		Module offered by		
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
8	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conter	its					
Current or stud			. Accredited academi	c achievements, e.g	. in case of change of university	
Intend	ed lear	ning outcomes				
classif	y the su	ne measuring and/or evalobject-specific contexts and number of weekly contact hours,	nd know the applicat	ion areas.	s knowledge. They are able to	
V (4) +	R (2)					
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocation of places						
Additional information						
Worklo	Workload					
240 h						
Teachi	ng cvcl	e				
	- Caroning Cycle					



Modul	e title				Abbreviation		
Current Topics in Theoretical Physics 11-BXT5-152-mo1							
Modul	e coord	linator		Module offered by	y .		
chairp	erson c	f examination committe	e	Faculty of Physics	and Astronomy		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	nination committee	required.		
Conter	ıts						
	t topics abroad	•	Accredited academic	achievements, e.g.	in case of change of university or		
Intend	ed lear	ning outcomes					
sics of Physic	the Ba s and h	chelor's programme. The	ey have advanced spe	cialist knowledge o	s of a module of Theoretical Phy- of a subdiscipline of Theoretical acquired methods to current pro-		
Course	<b>S</b> (type,	number of weekly contact hours,	language — if other than Ge	rman)			
V (2) +	R (2)						
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)							
	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method						

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami-

nation date at the latest. Language of assessment: German and/or English

# Allocation of places

# **Additional information**

# Workload

150 h

# **Teaching cycle**



	TANK TO WE OVER THE TANK THE T					
Module	Module title				Abbreviation	
Curren	t Topics	s in Theoretical Physics			11-BXT6-152-m01	
Module	e coord	inator		Module offered by		
chairpe	erson o	f examination committee	_	Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee re	equired.	
Conten	ts					
Current study a		of Theoretical Physics. A	accredited academic	achievements, e.g. ir	n case of change of university or	
Intend	ed learı	ning outcomes				
sics of Physics blems	the Bac s and h of Theo	chelor's programme. The ave mastered the require retical Physics.	y have advanced spe ed methods. They are	cialist knowledge of able to apply the ac	of a module of Theoretical Phy- a subdiscipline of Theoretical quired methods to current pro-	
		umber of weekly contact hours, I	anguage — if other than Ger	man)		
V (3) +						
		<b>Gessment</b> (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether	
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocation of places						
Additio	nal inf	ormation				
Worklo	ad					
180 h						



Module title Abbreviation						
Current Topics in Theoretical Physics 11-BXT8-152-mo1						
Module coordinator				Module offered by	l	
chairpe	erson o	of examination commi	ttee	Faculty of Physics a	and Astronomy	
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)		
8	nume	erical grade				
Duratio	n	Module level	Other prerequisites	•		
ı seme	ster	undergraduate	Approval from exan	Approval from examination committee required.		
Conten	ts					
Current study a	•	•	cs. Accredited academic	achievements, e.g. i	n case of change of university o	
ntende	ed lear	ning outcomes				
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.						
Course	<b>S</b> (type,	number of weekly contact ho	ours, language — if other than Ge	rman)		
V (4) +	R (2)					
		<b>sessment</b> (type, scope, lable for bonus)	anguage — if other than German,	examination offered — if no	ot every semester, information on whethe	
					didate each (approx. 30 minut	

written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Allocation of places
Additional information
Workload

**Teaching cycle** 

240 h

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

\_\_\_\_\_



Module title Abbreviation							
Selected Topics in Astrophysics 11-CSA6-152-r					11-CSA6-152-m01		
Modul	e coord	inator		Module offered by			
chairp	erson o	f examination committee	!	Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)			
6	nume	rical grade					
Durati	on	Module level	Other prerequisites				
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.		
Conter	nts						
Select	ed topio	cs of Astrophysics.					
Intend	ed lear	ning outcomes					
tion m	ethods				stand the measuring and evalua- subject-specific contexts and		
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)			
V (3) +	R (1)						
		sessment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether		
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Alloca	tion of p	olaces					
Additio	onal inf	ormation					
Worklo	oad						
180 h							
Teachi	ng cycl	e					
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	immes)			
	- Commission regulations are teaching aregine programmed,						



Modul	e title	,			Abbreviation
Selected Topics in Solid State Physics					11-CSF6-152-m01
Modul	Module coordinator			Module offered by	ļ.
chairpe	erson o	f examination committee		Faculty of Physics a	ind Astronomy
ECTS	Metho	od of grading	Only after succ. con	ipl. of module(s)	
6	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.
Conter	ıts		,		
Selecte	ed topio	s of Solid-State Physics.			
Intend	ed lear	ning outcomes			
and ev	aluatio				nd understand the measuring classify the subject-specific con-
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	man)	
V (3) +	R (1)				
			ge — if other than German, (	examination offered — if no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocat	tion of p	olaces			
Additio	onal inf	ormation			
Worklo	ad				
180 h	-				
Teachi	ng cycl	e			
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)	



Module title Abbreviation							
Selected Topics in Particle Physics					11-CST6-152-m01		
Modul	Module coordinator			Module offered by	<u>I</u>		
chairp	erson o	f examination committee		Faculty of Physics a	and Astronomy		
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)			
6	nume	rical grade					
Durati	on	Module level	Other prerequisites				
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.		
Conte	nts						
Select	ed topic	cs of Particle Physics.					
Intend	ed lear	ning outcomes					
theore	tical me				sics and of the experimental or sify the subject-specific contexts		
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)			
V (3) +	R (1)						
		sessment (type, scope, langua ele for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether		
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English							
Alloca	tion of p	olaces					
Additio	onal inf	ormation					
Workload							
180 h							
Teachi	ng cycl	e					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						



Module title					
Selected Topics in Theoretical Physics 11-CSTh6-152-mo1					
	Module offered by				
!	Faculty of Physics a	and Astronomy			
Only after succ. con	pl. of module(s)				
Other prerequisites					
Approval from exam	ination committee r	equired.			
anguage — if other than Ger	man)				
ge — if other than German, o	examination offered — if no	ot every semester, information on whether			
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
s for teaching-degree progra	mmes)				
	Only after succ. com  Other prerequisites  Approval from exam  a special field of The to apply the acquired anguage — if other than German, of 2, approx. 30 minus of 2, approx. 30 minus of minutes).  method of assessmention of one candidate must inform student for English	Module offered by Faculty of Physics at Only after succ. compl. of module(s)  Other prerequisites  Approval from examination committee respectively.  a special field of Theoretical Physics and to apply the acquired methods to current anguage — if other than German)  ge — if other than German, examination offered — if not a minutes) or oral examination of one can of 2, approx. 30 minutes per candidate) of minutes).  method of assessment, this may be chastion of one candidate each or an oral examination of one candidate each or an oral examination of one students about this by four			



# **Summer Term 2023**

(o ECTS credits)



		13/3/41	J WE OVER ALL			
Module	title		Abbreviation			
Current	Topic	s in Experimental Physic	11-BXE5-152-m01			
Module	coord	inator		Module offered by		
chairpe	rson o	f examination committee	_	Faculty of Physics a	and Astronomy	
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Current or stud			. Accredited academi	c achievements, e.g	. in case of change of university	
Intende	ed lear	ning outcomes				
unders classify	tand th		uation methods nece nd know the applicat	essary to acquire this ion areas.	ine of Experimental Physics and s knowledge. They are able to	
V (2) +		initial of weekly contact flours, i	anguage in other than der	many		
Method	d of ass	<b>sessment</b> (type, scope, langua ole for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether	
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocation of places						
Additional information						
			•			
Worklo	Workload					
150 h						
Teachi	ng cycl	e				
	_					



Module	Module title Abbreviation					
Current Topics in Experimental Physics 11-BXE6-152-mo1						
Module	coord	inator		Module offered by		
chairpe	erson of	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	ıpl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Current or stud			. Accredited academi	c achievements, e.g	. in case of change of university	
Intende	ed learr	ning outcomes				
unders classify	tand th the su		uation methods necently necessity necessity necessity necessity necessity necessity necessity necessity necessity neces	essary to acquire this ion areas.	ine of Experimental Physics and s knowledge. They are able to	
V (3) +	R (1)					
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
or oral pages) If a writ stead to of assertation	examin or pres iten exa ake the ssment date at	ation in groups (groups dentation/talk (approx. 3damination was chosen as form of an oral examina	of 2, approx. 30 minu o minutes). method of assessmo tion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Allocation of places						
Additio	nal info	ormation				
Worklo	ad					
180 h						
Teachir	ng cycl	e				



					T	
	Module title Abbreviation					
Curren	Current Topics in Experimental Physics 11-BXE8-152-mo1					
Module	e coord	inator		Module offered by		
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	pl. of module(s)		
8	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Current or stud	•		. Accredited academi	c achievements, e.g	. in case of change of university	
Intend	ed lear	ning outcomes				
classif	the su <b>s</b> (type, r	te measuring and/or evalubject-specific contexts a number of weekly contact hours, l	nd know the applicat	ion areas.	s knowledge. They are able to	
		SASSMANT (type scope langua	go — if other than German	evamination offered — if no	ot every semester, information on whether	
		le for bonus)	ge in other than definant,	examination offered in the	t every semester, information on whether	
or oral pages) If a wri- stead t of asse nation	examin or pres tten exa ake the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). method of assessmo tion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Allocation of places						
Additio	nal inf	ormation				
Worklo	ad					
240 h	_					



		1 36.78	5 (62%) 8	33 <b>9.~19</b>	
Module	title	-			Abbreviation
Current	Current Topics in Theoretical Physics				11-BXT5-152-m01
Module	coord	inator		Module offered by	-
chairpe	erson o	f examination committee	!	Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Duratio	n	Module level	Other prerequisites	i	
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.
Conten	ts				
Current study a		of Theoretical Physics. <i>F</i>	Accredited academic	achievements, e.g. i	n case of change of university or
Intende	ed learı	ning outcomes			
Physics blems	and h		ed methods. They are	able to apply the ac	a subdiscipline of Theoretical equired methods to current pro-
V (2) +	R (2)				
		sessment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether
or oral pages) If a writ stead t of asse nation	examin or pres aten exa ake the essmen date at	ation in groups (groups sentation/talk (approx. 3 amination was chosen as form of an oral examina	of 2, approx. 30 minutes).  o minutes).  s method of assessmetion of one candidate  must inform student	ites per candidate) c ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may institution in groups. If the method weeks prior to the original exami-
Allocat	ion of p	olaces			
Additio	nal inf	ormation			
Worklo	ad				

150 h

**Teaching cycle** 

--

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 

--



Module title					Abbreviation		
Current Topics in Theoretical Physics					11-BXT6-152-m01		
Module coordinator Module				Module offered by	I.		
chairperson of examination committee				Faculty of Physics and Astronomy			
ECTS	CTS Method of grading Only after succ. comp			pl. of module(s)			
6	nume	rical grade		]			
Duration Module level Other prerequisites							
1 semester undergraduate Approval from examination committee required.							
Conter	ıts		,				
	t topics abroad.	•	s. Accredited academic	achievements, e.g. i	n case of change of university or		
Intond	od loar	ning outcomes					

#### **Intended learning outcomes**

The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.

Courses (type, number of weekly contact hours, language - if other than German)

V(3) + R(1)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

# Allocation of places

**Additional information** 

\_\_

Workload

180 h

**Teaching cycle** 

--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

--



Module title		13/3/41	O WE OVER BUILDING	)		
Module coordinator  chairperson of examination committee  ECTS Method of grading Only after succ. compl. of module(s)  8 numerical grade   Duration Module level Other prerequisites  1 semester undergraduate Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university of study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (a) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	Module title	,			Abbreviation	
chairperson of examination committee  ECTS Method of grading Only after succ. compl. of module(s)  numerical grade  puration Module level Other prerequisites  1 semester undergraduate Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university of study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	Current Topics	s in Theoretical Physics			11-BXT8-152-m01	
ECTS Method of grading	Module coord	inator		Module offered by		
B numerical grade  Duration Module level Other prerequisites  1 semester undergraduate Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university of study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minute or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	chairperson o	f examination committee		Faculty of Physics a	and Astronomy	
Duration Module level Approval from examination committee required.  Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university of study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minute or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the methof assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	ECTS Metho	od of grading	Only after succ. con	npl. of module(s)		
Contents  Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university of study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the methof assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	8 nume	rical grade				
Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university of study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the methof assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	Duration	Module level	Other prerequisites	Other prerequisites		
Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university of study abroad.  Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	1 semester	undergraduate	Approval from exam	ination committee re	equired.	
Intended learning outcomes  The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minute or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	Contents					
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minute or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	1	•	accredited academic	achievements, e.g. ir	n case of change of university or	
sics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.  Courses (type, number of weekly contact hours, language — if other than German)  V (4) + R (2)  Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minute or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	Intended learn	ning outcomes				
Wethod of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	sics of the Bac Physics and h blems of Theo	chelor's programme. The ave mastered the require retical Physics.	y have advanced speed methods. They are	cialist knowledge of able to apply the ac	a subdiscipline of Theoretical	
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minute or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	-	number of weekly contact hours, l	anguage — if other than Ger	rman)		
module is creditable for bonus)  written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.	(),					
or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.			ge — if other than German,	examination offered — if no	ot every semester, information on whether	
	or oral examin pages) or pres If a written exa stead take the of assessmen nation date at	nation in groups (groups of sentation/talk (approx. 3) amination was chosen as a form of an oral examina t is changed, the lecturer the latest.	of 2, approx. 30 minu o minutes). s method of assessmo tion of one candidate r must inform student	tes per candidate) o ent, this may be char e each or an oral exa	r project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method	
Allocation of places						
Additional information	Additional inf	ormation				
Workload	Workload					
arah	240 h					



Module	Module title Abbreviation							
Selected Topics in Astrophysics 11-CSA6-152-mo1					11-CSA6-152-m01			
Module	coord	inator		Module offered by				
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy			
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)				
6	nume	rical grade						
Duratio	n	Module level	Other prerequisites					
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.			
Conten	ts							
Selecte	d topic	cs of Astrophysics.						
Intende	ed learı	ning outcomes						
tion me	ethods				stand the measuring and evalua- subject-specific contexts and			
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)				
V (3) +	R (1)							
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether			
or oral pages) If a writ stead to of asse nation	examin or pres tten exa ake the ssmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). s method of assessme tion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-			
Allocation of places								
Additional information								
Workload								
180 h								
Teachi	ng cvcl	e						
Referre	d to in	LPO I (examination regulation	s for teaching-degree progra	mmes)				
		Referred to in LPO I (examination regulations for teaching-degree programmes)						



Modul	Module title Abbreviation					
Selected Topics in Particle Physics 11-CST6-152-mo1					11-CST6-152-m01	
Module coordinator				Module offered by	<u>I</u>	
chairp	erson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. com	npl. of module(s)		
6	nume	rical grade				
Duration Module level Other prerequisites						
1 seme	ester	undergraduate	Approval from exam	ination committee r	equired.	
Conte	ıts					
Select	ed topio	cs of Particle Physics.				
Intend	ed lear	ning outcomes				
theore	The students have basic knowledge of a special field of Elementary Particle Physics and of the experimental or theoretical methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.					
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)		
V (3) +	R (1)					
		sessment (type, scope, langua ele for bonus)	ge — if other than German, e	examination offered — if no	ot every semester, information on whether	
or oral pages) If a wri stead to of asse nation	examir or pres tten exa take the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) r project report (approx. 8 to 10 nged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Allocation of places						
<u>re-</u>						
Additional information						
<del></del>						
Workle	oad		,			
180 h			,			
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	mmes)		



Module coordinator  chairperson of examination committee  ECTS Method of grading 6 numerical grade 1 semester graduate  Module offered by Faculty of Physics and Astronomy  Only after succ. compl. of module(s)   Other prerequisites  Approval from examination committee required.  Contents	Module title					Abbreviat	ion	
chairperson of examination committee  Faculty of Physics and Astronomy  Method of grading  Only after succ. compl. of module(s)  numerical grade   Duration  Module level  1 semester  graduate  Approval from examination committee required.	Current Topics in Physik				11-EXP6A-	-161-m01		
ECTS Method of grading Only after succ. compl. of module(s)  6 numerical grade  Duration Module level Other prerequisites  1 semester graduate Approval from examination committee required.  Contents	Module coordinator					Module offered by		
6 numerical grade  Duration Module level Other prerequisites  1 semester graduate Approval from examination committee required.  Contents	chairperson of examination committee					Faculty of Physics and Astronomy		
Duration     Module level     Other prerequisites       1 semester     graduate     Approval from examination committee required.       Contents	ECTS	CTS Method of grading Only after succ. compl. of module(s)						
1 semester graduate Approval from examination committee required.  Contents	6	nume	rical grade					
Contents	Duration Module level Other prerequisite				sites	s		
	1 seme	1 semester graduate Approval from examination committee required.						
Current tonics in Experimental or Theoretical Physics, Credited academic achievements, e.g. in case	Contents							
university or study abroad.		•	•	Theoretical Physics. C	redite	d academic achievements, e.	g. in case of change of	
Intended learning outcomes	Intende	ed lear	ning outcomes					

The students have advanced competencies corresponding to the requirements of a module of Experimental or Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.

Courses (type, number of weekly contact hours, language - if other than German)

V(3) + R(1)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

## Allocation of places

--

## **Additional information**

--

# Workload

180 h

# **Teaching cycle**

--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

--



Module title Abbreviation						
Current	Topics in Physik		11-EXP7-161	-m01		
Module coordinator			Module offered by			
chairper	rson of examination comm	nittee	Faculty of Physics and Astronom	าy		
ECTS	Method of grading	Only after succ. c	ompl. of module(s)			
7	numerical grade					
Duratior	n Module level	Other prerequisit	es			
1 semes	ter graduate	Approval from exa	mination committee required.			
Content	S					
	topics of Experimental and of university or study abro		credited academic achievements,	e.g. in case of		
Intende	d learning outcomes					
Theoreti subdisci	ical Physics of the Master' ipline of Physics and unde	s programme of Nanost erstand the measuring a	g to the requirements of a module of ucture Technology. They have knownd/or calculation methods necession ontexts and know the application	wledge of a current ary to acquire this		
Courses (type, number of weekly contact hours, language — if other than German)						
Courses	V (3) + R (1)					
	(1)					
V (3) + R <b>Method</b>		language — if other than Germa	n, examination offered — if not every semester	, information on whethe		

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

				1
	ncati	on a	st ni	aces
ALL	JLALI	uii (	וט וע	aces

# **Additional information**

# Workload

210 h

# **Teaching cycle**

**Referred to in LPO I** (examination regulations for teaching-degree programmes)



# Winter Term 2023

(o ECTS credits)



Module	Module title Abbreviation						
Current Topics in Experimental Physics 11-BXE5-152-mo1							
Module coordinator Module offered			Module offered by	-			
chairpe	erson o	f examination comm	ittee	Faculty of Physics a	and Astronomy		
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)			
5	nume	rical grade					
Duratio	n	Module level	Other prerequisites				
1 seme	ster	undergraduate	Approval from exam	nination committee r	equired.		
Conten	ts						
Current or stud			sics. Accredited academ	ic achievements, e.g	, in case of change of university		
Intend	ed lear	ning outcomes					
classify	the su <b>s</b> (type, r	ubject-specific contex	evaluation methods need cts and know the applica ours, language — if other than Ge	tion areas.	s knowledge. They are able to		
Metho	d of ass	sessment (type, scope, la ble for bonus)	anguage — if other than German,	examination offered — if no	ot every semester, information on whether		
or oral pages) If a writ stead t of asse nation	examir or pres ten exa ake the ssmen date at	nation in groups (grous sentation/talk (appro amination was chose e form of an oral exar	ups of 2, approx. 30 minuox. 30 minuox. 30 minutes). en as method of assessminination of one candidate turer must inform studen	ites per candidate) c ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may institution in groups. If the method weeks prior to the original exami-		
Allocation of places							
Additio	nal inf	ormation	,				
			,				
Worklo	ad						
150 h							
-)							



Module title Abbreviation					
Current	t Topic	s in Experimental Phy	sics		11-BXE6-152-m01
Module	e coord	inator		Module offered by	-
chairperson of examination committee			tee	Faculty of Physics a	and Astronomy
ECTS	S Method of grading Only after succ. compl. of module(s)				
6	nume	rical grade			
Duratio	n	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	nination committee r	equired.
Conten	ts		`		
Current or stud	•		ics. Accredited academ	ic achievements, e.g	, in case of change of university
Intende	ed lear	ning outcomes			
classify	the su <b>s</b> (type, r	ubject-specific context	ts and know the applicaturs, language — if other than Ge	tion areas.	s knowledge. They are able to
		sessment (type, scope, landle for bonus)	nguage — if other than German,	examination offered — if no	ot every semester, information on whether
or oral pages) If a writ stead to of asse nation	examir or pres tten exa ake the essmen date at	nation in groups (grou sentation/talk (approx amination was choser e form of an oral exam	ps of 2, approx. 30 minutes). It as method of assessmination of one candidate are must inform student	ites per candidate) c ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may intended in groups. If the method weeks prior to the original exami-
Allocat	ion of p	places			
Additio	nal inf	ormation			
Worklo	ad				
180 h			,		
	ng cycl				



W	ÜRZBU	JRG 1	5628	83 2 2 1	PHYSICS
Module	e title	<u> </u>			Abbreviation
Current	t Topic	s in Experimental Physic	S		11-BXE8-152-m01
Module coordinator				Module offered by	'
chairpe	erson o	f examination committee	1	Faculty of Physics	and Astronomy
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)	
8	nume	rical grade			
Duratio	on	Module level	Other prerequisites	;	
1 seme	ster	undergraduate	Approval from exam	nination committee i	required.
Conten	ts		•		
Current or stud	•		. Accredited academ	ic achievements, e.g	g. in case of change of university
Intend	ed lear	ning outcomes			
sics of unders	the Ba tand th	chelor's programme. The	y have knowledge of luation methods nec	a current subdiscipl essary to acquire thi	of a module of Experimental Phy- ine of Experimental Physics and s knowledge. They are able to
Course	<b>S</b> (type, i	number of weekly contact hours,	language — if other than Ge	rman)	
V (4) +	R (2)				
		sessment (type, scope, langua ble for bonus)	age — if other than German,	examination offered — if n	ot every semester, information on whether
or oral pages) If a writ	examir or pres tten ex	nation in groups (groups sentation/talk (approx. 3 amination was chosen as	of 2, approx. 30 minu o minutes). s method of assessm	utes per candidate) of ent, this may be cha	ndidate each (approx. 30 minutes or project report (approx. 8 to 10 anged and assessment may interpolation in groups. If the method

stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

#### Allocation of places

#### **Additional information**

# Workload

240 h

# Teaching cycle



Module title Abbreviation						
Current	t Topic	s in Physik			11-EXP6A-161-m01	
Module	coord	linator		Module offered	by	
hairpe	erson c	of examination comm	ittee	Faculty of Physic	cs and Astronomy	
ECTS	Meth	od of grading	Only after succ	. compl. of module(s)		
5	nume	erical grade				
Duratio	n	Module level	Other prerequi	sites		
seme	ster	graduate	Approval from 6	examination committe	ee required.	
Conten	ts					
		s in Experimental or study abroad.	Theoretical Physics. C	redited academic ach	nievements, e.g. in case of change	
ntend	ed lear	ning outcomes				
Theore subdis	tical Pl cipline	hysics of the Master' of Physics and unde	s programme of Nancerstand the measuring	ostructure Technology g and/or calculation n	nts of a module of Experimental or . They have knowledge of a current nethods necessary to acquire this the application areas.	
Course	<b>S</b> (type,	number of weekly contact h	ours, language — if other th	an German)		
/ (3) +	R (1)					
Metho	d of as	sessment (type, scope,	anguage — if other than Ger	rman, examination offered —	if not every semester, information on whether	

nutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (ap prox. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Allocation	of places

**Additional information** 

Workload

180 h

Teaching cycle

**Referred to in LPO I** (examination regulations for teaching-degree programmes)



Module offered by Faculty of Physics and Astronomy				
<del>'</del>				
Faculty of Physics and Astronomy				
Taculty of Filysics and Astronomy				
Only after succ. compl. of module(s)				
ther prerequisites				
nination committee required.				
Current topics of Experimental and Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad.				
t				

Courses (type, number of weekly contact hours, language - if other than German)

V(3) + R(1)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this

knowledge. They are able to classify the subject-specific contexts and know the application areas.

written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

# Allocation of places

Additional information

Workload

210 h

**Teaching cycle** 

--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

--



W	ÜRZBI	JRG \	5 (123 )	33 9 2 1	Physics
Module	e title				Abbreviation
Curren	t Topic	s in Theoretical Physics			11-BXT5-152-m01
Module coordinator				Module offered by	I.
chairpe	erson o	f examination committee	2	Faculty of Physics a	and Astronomy
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)	
5	nume	rical grade			
Duratio	on	Module level	Other prerequisites		
1 seme	ster	undergraduate	Approval from exam	nination committee r	equired.
Conten	its				
Current study a			Accredited academic	achievements, e.g. i	n case of change of university or
Intend	ed lear	ning outcomes			
sics of Physics	the Ba s and h	chelor's programme. The	y have advanced spe	cialist knowledge of	of a module of Theoretical Phy- a subdiscipline of Theoretical quired methods to current pro-
Course	<b>S</b> (type, i	number of weekly contact hours,	language — if other than Ge	rman)	
V (2) +	R (2)				
		sessment (type, scope, langua ble for bonus)	age — if other than German,	examination offered — if no	ot every semester, information on whether
or oral pages) If a wri	examir or pres tten ex	nation in groups (groups sentation/talk (approx. 3 amination was chosen as	of 2, approx. 30 minu o minutes). s method of assessm	ites per candidate) o ent, this may be cha	didate each (approx. 30 minutes) or project report (approx. 8 to 10 nged and assessment may intended in groups. If the method
					weeks prior to the original exa

nation date at the latest. Language of assessment: German and/or English

			•			
	nrai	tion	Λt	nl	20	ΔC
חוני	uca	LIVII	vı	νι	aı	CJ

#### **Additional information**

# Workload

150 h

# **Teaching cycle**



Modul	e title				Abbreviation
Current Topics in Theoretical Physics			ics		11-BXT6-152-m01
Module coordinator				Module offe	red by
chairpe	erson c	of examination comm	ittee	Faculty of Pl	nysics and Astronomy
ECTS	Meth	od of grading	Only after su	icc. compl. of modul	e(s)
6	nume	erical grade			
Duratio	on	Module level	Other prereq	uisites	
1 seme	ester	undergraduate	Approval fro	m examination comr	nittee required.
Conter	nts				
Curren	•		cs. Accredited aca	demic achievements	s, e.g. in case of change of university or
Intend	ed lear	ning outcomes			
sics of Physic	the Ba s and h	chelor's programme.	They have advance	ed specialist knowle	ments of a module of Theoretical Phyedge of a subdiscipline of Theoretical the acquired methods to current pro-
Course	es (type,	number of weekly contact ho	ours, language — if othe	r than German)	
V (3) +	R (1)				
		<b>sessment</b> (type, scope, lable for bonus)	anguage — if other than	German, examination offer	$\operatorname{\sf ed}-\operatorname{\sf if}$ not every semester, information on whether
or oral pages) If a wri	exami or pre tten ex	nation in groups (grou sentation/talk (appro amination was chose	ups of 2, approx. 3 ex. 30 minutes). en as method of as	so minutes per candi ssessment, this may	the candidate each (approx. 30 minute date) or project report (approx. 8 to 10 be changed and assessment may intral examination in groups. If the methoral

nation date at the latest. Language of assessment: German and/or English

# **Allocation of places**

# **Additional information**

# Workload

180 h

# **Teaching cycle**



Modul	e title				Abbreviation
Current Topics in Theoretical Physics 11-BXT8-152-mo1					
Module coordinator				Module offere	d by
chairpe	erson o	of examination commit	tee	Faculty of Phy	sics and Astronomy
ECTS	Meth	od of grading	Only after succ. o	compl. of module(	s)
8	nume	erical grade			
Duratio	on	Module level	Other prerequisi	tes	
1 seme	ster	undergraduate	Approval from ex	amination commi	ttee required.
Conter	its				
Current topics of Theoretical Physics. Accredited academic achievements, e.g. in case of change of university or study abroad.					
Intend	ed lear	ning outcomes			
sics of Physic	the Ba s and h	chelor's programme. T	hey have advanced s	pecialist knowled	ents of a module of Theoretical Phyge of a subdiscipline of Theoretical he acquired methods to current pro-
Course	<b>S</b> (type,	number of weekly contact hou	ırs, language — if other than	German)	
V (4) +	R (2)				
		<b>sessment</b> (type, scope, lan ble for bonus)	nguage — if other than Germ	an, examination offered	- if not every semester, information on whether
or oral	examiı		os of 2, approx. 30 m		e candidate each (approx. 30 minute ate) or project report (approx. 8 to 10

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: German and/or English

Allocation of places

**Additional information** 

Workload

240 h

**Teaching cycle** 



Modul	e title	<u> </u>			Abbreviation	
Select	ed Topi	cs in Astrophysics			11-CSA6-152-m01	
Modul	e coord	inator		Module offered by		
chairp	erson o	f examination committee	!	Faculty of Physics a	and Astronomy	
ECTS	CTS Method of grading Only after succ. co			npl. of module(s)		
6	nume	rical grade				
Durati	on	Module level	Other prerequisites			
1 semester undergraduate Approval from examination committee required.						
Contents						
Select	ed topio	cs of Astrophysics.				
Intend	ed lear	ning outcomes				
tion m	ethods				stand the measuring and evalua- subject-specific contexts and	
Course	<b>es</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)		
V (3) +	R (1)					
		sessment (type, scope, langua le for bonus)	ge — if other than German,	examination offered — if no	ot every semester, information on whether	
or oral pages) If a wri stead to of asse nation	examir or pres tten exa take the essmen date at	nation in groups (groups of sentation/talk (approx. 30 amination was chosen as a form of an oral examina	of 2, approx. 30 minu o minutes). s method of assessmo tion of one candidate must inform student	tes per candidate) o ent, this may be cha e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Alloca	tion of p	olaces				
Additio	onal inf	ormation				
Worklo	oad					
180 h						
Teachi	ng cycl	e				
Referre	ed to in	LPO I (examination regulation	s for teaching-degree progra	immes)		
		-				



Selected Topics in Particle Physics				
		11-CST6-152-m01		
Module coordinator	Module offered	Module offered by		
chairperson of examination committee	Faculty of Phys	ics and Astronomy		
ECTS Method of grading Only after succ. o	ompl. of module(s	)		
6 numerical grade				
Duration Module level Other prerequisi	es			
1 semester undergraduate Approval from examination committee required.				
Contents				
Selected topics of Particle Physics.				
Intended learning outcomes				
The students have basic knowledge of a special field of I theoretical methods necessary to acquire this knowledge and know the application areas.				
$\textbf{Courses} \ (\textbf{type, number of weekly contact hours, language} - \textbf{if other than}$	German)			
V (3) + R (1)				
$\begin{tabular}{ll} \bf Method\ of\ assessment\ (type,\ scope,\ language-if\ other\ than\ Germ\ module\ is\ creditable\ for\ bonus) \end{tabular}$	an, examination offered	– if not every semester, information on whether		
written examination (approx. 90 to 120 minutes) or oral er or oral examination in groups (groups of 2, approx. 30 m pages) or presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assess stead take the form of an oral examination of one candid of assessment is changed, the lecturer must inform stud nation date at the latest. Language of assessment: German and/or English	nutes per candida ment, this may be ate each or an ora	te) or project report (approx. 8 to 10 changed and assessment may interest examination in groups. If the method		
Allocation of places				
Additional information				
Workload				
180 h				
Teaching cycle				
Referred to in LPO I (examination regulations for teaching-degree pr	ogrammes)			



# **Summer Term 2024**

(o ECTS credits)



Module title				Abbreviation	
Current Topics	in Experimental Physics	5		11-BXE5-152-m01	
Module coordi	nator		Module offered by	<u></u>	
chairperson of examination committee			Faculty of Physics a	and Astronomy	
ECTS Metho	d of grading	Only after succ. com	pl. of module(s)		
5 numeri	ical grade				
Duration	Module level	Other prerequisites			
1 semester	undergraduate	Approval from exam	ination committee r	equired.	
Contents					
Current topics or study abroad		. Accredited academi	c achievements, e.g.	. in case of change of university	
Intended learn	ing outcomes				
Courses (type, nu	e measuring and/or eval oject-specific contexts a umber of weekly contact hours, l	nd know the applicat	ion areas.	s knowledge. They are able to	
V (2) + R (2)					
Method of assemodule is creditable		ge — if other than German, e	examination offered — if no	ot every semester, information on whether	
or oral examina pages) or prese If a written exa- stead take the of assessment nation date at t	ation in groups (groups of entation/talk (approx. 30 mination was chosen as form of an oral examina is changed, the lecturer	of 2, approx. 30 minu o minutes). method of assessme tion of one candidate must inform student	tes per candidate) o ent, this may be char e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Allocation of p	laces				
Additional info	rmation				
Workload					
150 h					
Teaching cycle					



15 (23 7 8) 83 Ø 2 F						
Module title				Abbreviation		
Current Topi	cs in Experimental Physic	S		11-BXE6-152-m01		
Module coor	dinator		Module offered by	I.		
chairperson	of examination committee	1	Faculty of Physics a	and Astronomy		
ECTS Meth	od of grading	Only after succ. con	npl. of module(s)			
6 num	erical grade					
Duration	Module level	Other prerequisites				
1 semester	undergraduate	Approval from exam	ination committee r	equired.		
Contents						
Current topic or study abro		. Accredited academi	c achievements, e.g	. in case of change of university		
Intended lea	rning outcomes					
understand t classify the s	he measuring and/or evalubject-specific contexts a	luation methods nece and know the applicat	essary to acquire this ion areas.	ine of Experimental Physics and s knowledge. They are able to		
	number of weekly contact hours,	language — if other than Ge	rman)			
V (3) + R (1)						
Method of as module is credita		age — if other than German,	examination offered — if no	ot every semester, information on whether		
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English						
Allocation of	places					
Additional in	formation					

--

# Workload

180 h

# **Teaching cycle**

--

 $\textbf{Referred to in LPO I} \ \ (\text{examination regulations for teaching-degree programmes})$ 

--



	e title			Abbreviation		
Current Topics in Experimental Physics			cs	11-BXE8-152-m	101	
Module coordinator				Module offered by		
chairp	erson o	f examination committe	e	Faculty of Physics and Astronomy		
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)		
8	nume	rical grade				
Duratio	on	Module level	Other prerequisites			
1 seme	ester	undergraduate	Approval from exam	ination committee required.		
Conter	nts		`			
	t topics	•	s. Accredited academ	c achievements, e.g. in case of cha	nge of university	
Intend	led lear	ning outcomes				
understand the measuring and/or evaluation methods necessary to acquire this knowledge. They are able to classify the subject-specific contexts and know the application areas.						
classif	y the su	bject-specific contexts	aluation methods neco and know the applica	ion areas.		
classif <b>Course</b>	fy the su		aluation methods neco and know the applica	essary to acquire this knowledge. The ion areas.		
Course V (4) + Metho	es (type, recorded R (2)	ubject-specific contexts and the second seco	aluation methods neco and know the applica , language — if other than Ge	essary to acquire this knowledge. The ion areas.	ney are able to	
Classiff Course V (4) + Metho module i written or oral pages) If a wri stead t of asse nation	es (type, recommended)  R (2)  od of assist creditable  n examin examin or presidences itten examinate the essmen date at	sessment (type, scope, languale for bonus) nation (approx. 90 to 12 nation in groups (groups sentation/talk (approx. 3 amination was chosen a form of an oral examination	aluation methods nectand know the application methods nectand know the application in the second sec	essary to acquire this knowledge. Thion areas.	formation on whether oprox. 30 minutes) (approx. 8 to 10 ssment may inups. If the method	
Classification Course V (4) + Metho module i written or oral pages) If a wri stead t of asse nation Langua	es (type, recommended)  R (2)  od of assist creditable  n examin examin or presidences itten examinate the essmen date at	sessment (type, scope, languale for bonus) nation (approx. 90 to 12 nation in groups (groups sentation/talk (approx. 3 amination was chosen a form of an oral examination tis changed, the lecture of the latest.	aluation methods nectand know the application methods nectand know the application in the second sec	essary to acquire this knowledge. The ion areas.  The man ion offered — if not every semester, in the ion area in the ion of one candidate each (aptes per candidate) or project reported in this may be changed and assess the each or an oral examination in gro	formation on whether pprox. 30 minutes) (approx. 8 to 10 assment may inups. If the method	
Classification Course V (4) + Metho module i written or oral pages) If a wri stead t of asse nation Langua	es (type, reconstruction) or president examination or president examination of the examin	sessment (type, scope, languale for bonus) nation (approx. 90 to 12 nation in groups (groups sentation/talk (approx. 3 amination was chosen a form of an oral examination tis changed, the lecture of the latest.	aluation methods nectand know the application methods nectand know the application in the second sec	essary to acquire this knowledge. The ion areas.  The man ion offered — if not every semester, in the ion area in the ion of one candidate each (aptes per candidate) or project reported in this may be changed and assess the each or an oral examination in gro	formation on whether oprox. 30 minutes) (approx. 8 to 10 ssment may inups. If the method	

# Workload

240 h

# **Teaching cycle**



			A 12 (PROTING			
Module title Abbreviation						
Current Topics in Physik				11-EXP6A-161-m01		
Module	coord	inator		Module offered by		
chairpe	erson o	f examination comm	ittee	Faculty of Physics and Astronomy		
ECTS	Meth	od of grading	Only after succ. co	npl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisite	ites		
1 seme	ster	graduate	Approval from exar	Approval from examination committee required.		
Conten	ts					
Current topics in Experimental or Theoretical Physics. Credited academic achievements, e.g. in case of change of university or study abroad.						
Intende	ed lear	ning outcomes				
The stu	dents	have advanced com	petencies corresponding	to the requirements of a module of Experimental or		

**Courses** (type, number of weekly contact hours, language — if other than German)

V(3) + R(1)

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

Theoretical Physics of the Master's programme of Nanostructure Technology. They have knowledge of a current subdiscipline of Physics and understand the measuring and/or calculation methods necessary to acquire this

knowledge. They are able to classify the subject-specific contexts and know the application areas.

a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes).

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

#### **Allocation of places**

--

#### **Additional information**

--

#### Workload

180 h

#### **Teaching cycle**

--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)

--



Module title					Abbreviation
Current Topics in Physik					11-EXP7-161-m01
Module coordinator Module of				Module offered by	
chairp	erson o	f examination committee	9	Faculty of Physics a	and Astronomy
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)	
7	nume	rical grade			
Duration	on	Module level	Other prerequisites	i	
1 seme	ester	graduate	Approval from exam	nination committee r	equired.
Conter	nts				
		of Experimental and The versity or study abroad.	eoretical Physics. Acc	redited academic ac	hievements, e.g. in case of
Intend	ed lear	ning outcomes			
knowle Course	edge. Th	ney are able to classify the number of weekly contact hours,	ne subject-specific co	ntexts and know the	hods necessary to acquire this application areas.
V (3) +	R (1)				
			age — if other than German,	examination offered — if no	ot every semester, information on whether
written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Alloca	tion of p	olaces			
Additio	onal inf	ormation			
Worklo	oad				

210 h

**Teaching cycle** 



Module title Abbreviation							
Current Topics in Theoretical Physics 11-BXT5-152-mo1					11-BXT5-152-m01		
Module coordinator Module offer					1		
chairp	erson o	f examination committee		Faculty of Physics	and Astronomy		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)			
5	nume	rical grade					
Duratio	on	Module level	Other prerequisites				
1 seme	ester	undergraduate	Approval from exam	ination committee	required.		
Conter	nts						
	t topics abroad.		Accredited academic	achievements, e.g.	in case of change of university o		
Intend	ed lear	ning outcomes					
sics of Physic	the Ba s and h	chelor's programme. The	y have advanced spe	cialist knowledge o	s of a module of Theoretical Phy- of a subdiscipline of Theoretical cquired methods to current pro-		
Courses (type, number of weekly contact hours, language — if other than German)							
	R (2)						
	<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)						
V (2) + Metho							

of assessment is changed, the lecturer must inform students about this by four weeks prior to the original exami-

nation date at the latest. Language of assessment: German and/or English

Allocation of places

**Additional information** 

150 h

Workload

Teaching cycle



Module	e title				Abbreviation
Current Topics in Theoretical Physics					11-BXT6-152-m01
Module coordinator Module offered by					<u> </u>
chairpe	erson c	of examination commit	tee	Faculty of Physics	and Astronomy
ECTS	Meth	od of grading	Only after succ. cor	mpl. of module(s)	
6	nume	erical grade			
Duratio	on	Module level	Other prerequisites	5	
1 seme	ster	undergraduate	Approval from exan	nination committee	required.
Conten	ıts				
	t topics abroad		s. Accredited academic	achievements, e.g.	in case of change of university o
Intend	ed lear	ning outcomes			
sics of Physics	the Ba s and h	chelor's programme. T	hey have advanced spe	ecialist knowledge o	s of a module of Theoretical Phy- of a subdiscipline of Theoretical acquired methods to current pro-
Course	S (type,	number of weekly contact hou	rs, language — if other than Ge	rman)	
V (3) +	R (1)				
		<b>sessment</b> (type, scope, lan ble for bonus)	guage — if other than German,	examination offered — if	not every semester, information on whether
or oral pages)	examii or pre	nation in groups (group sentation/talk (approx	os of 2, approx. 30 minu . 30 minutes).	utes per candidate)	ndidate each (approx. 30 minute or project report (approx. 8 to 10
pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination.					

nation date at the latest. Language of assessment: German and/or English

#### Allocation of places

#### **Additional information**

# Workload

180 h

# **Teaching cycle**



Module title Abbreviation						
Current Topics in Theoretical Physics 11-BXT8-152-mo1						
Module coordinator				Module offered by		
chairpe	erson o	f examination comm	ittee	Faculty of Physics and Astronomy		
ECTS	Meth	od of grading	Only after succ. co	ompl. of module(s)		
8	nume	rical grade				
Duratio	n	Module level	Other prerequisite	es		
1 seme	ster	undergraduate	Approval from exa	mination committee required.		
Conten	ts					
Current study a			cs. Accredited academi	c achievements, e.g. in case of change of university o		
Intende	ed lear	ning outcomes				
The students have advanced competencies corresponding to the requirements of a module of Theoretical Physics of the Bachelor's programme. They have advanced specialist knowledge of a subdiscipline of Theoretical Physics and have mastered the required methods. They are able to apply the acquired methods to current problems of Theoretical Physics.						
Course	<b>S</b> (type, i	number of weekly contact h	ours, language — if other than G	German)		
V (4) +	R (2)					
		<b>sessment</b> (type, scope, l	anguage — if other than Germai	n, examination offered $-$ if not every semester, information on whether		
or oral	examir		ups of 2, approx. 30 mir	kamination of one candidate each (approx. 30 minute nutes per candidate) or project report (approx. 8 to 10		

If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.

Language of assessment: German and/or English

Allocation of places
Additional information
Workload

Teaching cycle

240 h

**Referred to in LPO I** (examination regulations for teaching-degree programmes)



Module title			,	Abbreviation	
Selected Topics in Astrophysics				11-CSA6-152-m01	
Module coordinator			Module offered by		
chairperson	of examination committee	2	Faculty of Physics a	and Astronomy	
ECTS Met	hod of grading	Only after succ. con	npl. of module(s)		
6 nun	nerical grade				
Duration	Module level	Other prerequisites			
1 semester	undergraduate	Approval from exam	ination committee r	equired.	
Contents					
Selected to	oics of Astrophysics.				
Intended lea	arning outcomes				
tion method				stand the measuring and evalua- subject-specific contexts and	
Courses (type	e, number of weekly contact hours,	language — if other than Ger	rman)		
V (3) + R (1)					
Method of a module is credit		age — if other than German, o	examination offered — if no	ot every semester, information on whether	
or oral exampages) or proof or	nination in groups (groups esentation/talk (approx. 3 examination was chosen as the form of an oral examina	of 2, approx. 30 minu o minutes). s method of assessmention of one candidate r must inform student	tes per candidate) o ent, this may be char e each or an oral exa	didate each (approx. 30 minutes) or project report (approx. 8 to 10 mged and assessment may inmination in groups. If the method weeks prior to the original exami-	
Allocation o	f places				
Additional i	nformation				
Workload					
180 h					
Teaching cy	cle				
Referred to in LPO I (examination regulations for teaching-degree programmes)					



Module	e title	,			Abbreviation	
Selecte	ed Topi	cs in Particle Physics			11-CST6-152-m01	
Module	e coord	inator		Module offered by		
chairpe	erson o	f examination committee		Faculty of Physics a	and Astronomy	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
6	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Approval from exam	ination committee r	equired.	
Conten	ts					
Selecte	d topic	cs of Particle Physics.				
Intend	ed lear	ning outcomes				
theoret	ical me				sics and of the experimental or sify the subject-specific contexts	
Course	<b>S</b> (type, r	number of weekly contact hours, l	anguage — if other than Ger	rman)		
V (3) +	R (1)					
		<b>sessment</b> (type, scope, langua le for bonus)	ge — if other than German, o	examination offered — if no	ot every semester, information on whether	
or oral pages) If a writ stead t of asse nation	written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or presentation/talk (approx. 30 minutes).  If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.  Language of assessment: German and/or English					
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	Workload					
180 h						
Teachi	ng cycl	e				
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					