

Annex SFB

Studienfachbeschreibung (subject description, SFB) for the subject FOKUS Physics as a Master's with 1 major with the degree "Master of Science" (120 ECTS credits)

Responsible: Faculty of Physics and Astronomy

Examination regulations version: 2011

Abbreviations used: Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V**

= 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 for the modules in this SFB:

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

Information on assessment procedures:

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 a 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:

ASP02009

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

29-Jun-2011 (2011-40) except for mandatory electives added in Fast Track procedure at a later time 25-Mar-2013 (2012-185) except for mandatory electives added in Fast Track procedure at a later time 26-Sep-2012 (2012-33) except for mandatory electives added in Fast Track procedure at a later time 04-Nov-2014 (2014-71) except for mandatory electives added in Fast Track procedure at a later time 17-Dec-2014 (2014-85)

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.

Every module will be described using the following form:

Abbreviation	Module title		'								
	ECTS		Duration	(in semesters)	Method of grading		Module level				
	Courses		To be spe	o be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y							
	Method of as	ssessme	ent								
	Only after su completion of		l if applica	if applicable							
	Other prereq	uisites	if applica	if applicable							
	Participants and allocation of places		cati- if applica	if applicable							
	Additional information		on if applica	if applicable							
	Referred to i	n LPO I	if applica	if applicable (examination regulations for teaching-degree programmes)							

Compulsory Course	es (54 ECTS credits)								
11-OSP-072-m01	Advanced Seminar Expo	erimental/Theoretical Ph	ysics						
	ECTS 4 Duratio	n 1 semester	Method of grading num	erical grade	Modul level	graduate			
	Courses	S (no information on SV	NS (weekly contact hours) a	nd course language availal	ole)				
	Method of assessment	talk with discussion (ap	prox. 30 to 45 minutes)						
11-PFM-111-m01	Advanced Practical Cou	rse Master							
	ECTS 10 Duratio	n 1 semester	Method of grading (not	successfully completed	Modul level	graduate			
	Courses	Fortgeschrittenen-Prakt Fortgeschrittenen-Prakt	Prep seminar for Fortgeschrittenen-Praktikum Master (Advanced Practical Course Master): S (1 weekly contact hour) Fortgeschrittenen-Praktikum Master (Advanced Practical Course Master) Part 1: P (3 weekly contact hours), German or English Fortgeschrittenen-Praktikum Master (Advanced Practical Course Master) Part 2: P (3 weekly contact hours), German or English Fortgeschrittenen-Praktikum Master (Advanced Practical Course Master) Part 3: P (3 weekly contact hours), German or English						
		minutes) 2. Lab course in part 1 (riment will be consid Performing and evalupare an experiment logare an experime	oral examination (approx. 5 to 10 er Part 1): a) Preparing the expessed prior to the experiment. b) test is passed. Students must preter Part 2): a) Preparing the expessed prior to the experiment. b) test is passed. Students must preter Part 3): a) Preparing the expessed prior to the experiment. b) test is passed. Students must preter Part 3): a) Preparing the expessed prior to the experiment. b) test is passed. Students must preter is passed. Students must preter (Advanced Practical Course extikum Master Parts 1 through 3. In the control of the experiment. To pass an as-						
11-FPP-072-m01	FOKUS Project Practica				1				
	ECTS 10 Duratio		Method of grading num		Modul level	graduate			
	Courses		VS (weekly contact hours) ar						
	Method of assessment	placement report / fieldwork report / report on practical training / report on practical course / project report / report on techni cal course (approx. 20 pages) and talk (approx. 30 minutes) on respective topic researched Language of assessment: German or English							

11-FS-PF-072-m01	Profess	sional S _l	pecializat	ion FO	KUS Physics						
	ECTS	15	Duration	l	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		S (no	(no information on SWS (weekly contact hours) and course language available)						
	Method of assessment talk with discussion (approx. 30 to 45 minutes) Language of assessment: German or English										
11-MP-PF-072-m01	Scienti	fic Meth	ods and	Project	Management FOKU	S Physics					
	ECTS	15	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment talk with discussion (approx. 30 to 45 minutes) Language of assessment: German or English										

Compulsory Electives (36 ECTS credits)

Specialisation Physic (20 ECTS credits)

Modules worth a total of 20 ECTS credits must be successfully completed. Of these 41 ECTS credits, no less than 5 are to be achieved in the sub-area "Experimentelle Physik" ("Experimental Physics") and in the sub-area "Theoretische Physik" ("Theoretical Physics") each.

Experimental Physics

Students must achieve a minimum of 5 ECTS credits.

Applied Physics and Metrology (Experiment)

11-A2-092-m01	Electro	nics										
 	ECTS		Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	Courses			/ + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of asse	essment	Asses nound	written examination (approx. 90 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.							
	other p	rerequis		tive do on to the le sessm	etails at the beginnir assessment. If stude cturer will put their r	ng of the course. Regents have obtained the gents have obtained the gistration for asses in the subsequent s	istration for the course will be c ne qualification for admission to sment into effect. Students who	considered a de o assessment o o meet all prere	form students about the respec- claration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- nts will have to obtain the quali-			
		oants an		Only a	as part of pool of gen	neral key skills (ASQ)	: 15 places. Places will be alloca	ated by lot.				

11-HLF-092-m01	Semico	nducto	r Lasers -	Princip	ples and Current F	Research					
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R + V ((no information o	n SWS (weekly contact	hours) and course language av	ailable)			
	Method	l of asse	essment	prox. to 10 p Asses nounc 2009.	Language of assessment: German, English						
	other p	rerequis	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-ENT-092-m01	Principles of Energy Technologies										
	ECTS 6 Duratio			1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R + V ((no information o	n SWS (weekly contact	hours) and course language av	ailable)			
	Method	d of asse	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
	other p	rerequis	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							

11-OHL-092-m01	Organi	c Semic	onductor									
	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	(no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass	essment	prox.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)							
	other prerequisites			to que cours obtai for as	Admission prerequisite to assessment: successful completion of approx. 50% of exercises. Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-BSV-122-m01		and Sig	nal Proce	ssing	sing in Physics							
	ECTS 6 Duratio		Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + R	(no information on	SWS (weekly contact I	nours) and course language av	ailable)				
	Method	1 of ass	essment	minus prese Asses noun	a) written examination (90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.							
	other prerequisites			tive d on to the le sessr	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
o8-PCM4-PHY-111-	Ultrafa	st Spec	troscopy	and Qı	uantum Control							
mo1	ECTS	5	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		S + Ü (no information on SWS (weekly contact hours) and course language available)								
	Method of assessment			written examination (90 minutes) or oral examination of one candidate each (20 minutes) or talk (30 minutes) Language of assessment: German or English								

11-ZDR-111-m01	Principles of two- an	d threedimensional Röntgen imaging									
	ECTS 6 Dura	tion 1 semester Method of grading numerical grade Modul level graduate									
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)									
	Method of assessme	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.									
	other prerequisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-QUI-132-m01	Quantum Information Technology										
	ECTS 6 Dura	tion 1 semester Method of grading numerical grade Modul level graduate									
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)									
		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
11-EXE6A-112-m01											
	ECTS 6 Dura	tion 1 semester Method of grading numerical grade Modul level graduate									
	Courses	V + R (no information on SWS (weekly contact hours) and course language available)									
	Method of assessme	a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English									
	other prerequisites	Approval by examination committee required.									

11-EXP6-111-m01	Curren	t Topics	in Physic	:5		,								
	ECTS	6	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	:S		V + R	V + R (no information on SWS (weekly contact hours) and course language available)									
	Method	d of ass	essment	specif modu weeks	a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English									
	other p	rerequi	sites	Appro	val by examinatior	n committee required.								
Solid State Physics	s and Na	and Nanostructures (Experiment)												
11-SPD-102-m01	Semico	onducto	r Physics	and De	nd Devices									
	ECTS	6	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	:S		V + R	(no information on	SWS (weekly contact	hours) and course language av	ailable)						
	Method	d of ass	essment	written examination (approx. 90 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English										
	other p	rerequi	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										

11-FK2-092-m01	Solid State Physics 2												
	ECTS	8	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S	1	R + V (no information on	SWS (weekly contact	thours) and course languag	ge available)					
	Method	d of asse	1	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequis	1	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-FKS-092-m01	Solid State Spectroscopy												
	ECTS 6 Duratio				1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S	I	R + V (no information on	SWS (weekly contact	thours) and course languag	ge available)					
	Method	d of asse	1	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequis	1	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-HLF-092-m01	Semiconductor Lasers - Principles and Current Research												
	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V	(no information or	SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	orerequi	sites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-HLP-092-m01	Semiconductor Physics												
	ECTS 6 Duratio			1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	s		R + V	R + V (no information on SWS (weekly contact hours) and course language available)								
	Method	d of ass	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	orerequi	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-HNS-092-m01	Semico	nductor	Nanostru	ctures	5						
	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	s		R + V ((no information or	SWS (weekly contact	hours) and course language a	vailable)			
	Method	d of asse	1	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
	other p	rerequis	1	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-MAG-092-m01	Magnetism										
	ECTS 6 Duratio				1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R + V ((no information or	SWS (weekly contact	hours) and course language a	vailable)			
	Method	d of asse	1	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
	other p	rerequis	1	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							

11-NAN-092-m01	Nanoar	nalytics										
	ECTS	6	Duration	ı	1 semester	Method of grading r	umerical grade	Modul level	graduate			
	Course	S		R + V	(no information or	SWS (weekly contact he	ours) and course language av	ailable)				
	Method	d of asso		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-NDS-092-m01	Low-Di	Low-Dimensional Structures										
	ECTS	4	Duration	ו	1 semester	Method of grading r	umerical grade	Modul level	graduate			
	Course	S		R + V	(no information or	SWS (weekly contact he	ours) and course language av	ailable)				
	Method	d of asso	essment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (a prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be a nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-QTH-102-m01	Quantu	ım Tran	sport in Se	emicor	nductor Nanostruc	tures					
	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + R ((no information on	SWS (weekly contact	hours) and course language av	ailable)			
	Method	d of ass		prox. to 10 p Asses nounc 2009.	30 minutes per ca pages, time to con sment offered: Wh ced in due form un	ndidate, for modules on the plete: 1 to 4 weeks) on the name and how often ass	with less than 4 ECTS credits ap or d) presentation/seminar prese	prox. 20 minute entation (approx ds on the metho	d of assessment and will be an-		
	other p	rerequi		tive do on to a the lea	etails at the begin assessment. If stu cturer will put thei nent in the current	ning of the course. Re dents have obtained t r registration for asse:	gistration for the course will be the qualification for admission t ssment into effect. Students wh	considered a de to assessment o o meet all prere	form students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-		
11-NOP-092-m01	Nano-C	ptics						,			
	ECTS 4 Duratio				1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		R + V ((no information on	SWS (weekly contact	hours) and course language av	ailable)			
	Method	d of ass		prox. 3 to 10 p Asses nound 2009.	30 minutes per ca pages, time to con sment offered: Wh ced in due form un	ndidate, for modules on the plete: 1 to 4 weeks) on the plete: 1 to 4 weeks) on the plete ass	with less than 4 ECTS credits ap or d) presentation/seminar prese	prox. 20 minute entation (approx ds on the metho	d of assessment and will be an-		
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							

11-QPM-092-m01	Quantu	ım Pher	omena in	electr	onic correlated M	aterials						
	ECTS	6	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R + V	(no information or	1 SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass		prox. to 10 p Asses nound 2009.	30 minutes per ca pages, time to cor sment offered: Wl ced in due form ur	indidate, for modules v nplete: 1 to 4 weeks) o hen and how often ass	with less than 4 ECTS credits apport of the contraction of the contrac	prox. 20 minute entation (approx Is on the metho	d of assessment and will be an-			
	other p	rerequi		tive do on to the le sessm	ertain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, we lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualication for admission to assessment anew.							
11-SPI-102-m01	Spintronics											
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + R	(no information or	1 SWS (weekly contact	hours) and course language ava	ailable)				
	Method	d of ass	essment	prox. to 10 p Asses nound 2009.	Language of assessment: German, English							
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-MSS-102-m01	Methods in Surface Spectroscopy											
	ECTS 4	Duration	1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses		V (no information on S	SWS (weekly contact hours) and course langua	age available)							
	Method of assess		prox. 30 minutes per of to 10 pages, time to co Assessment offered: V nounced in due form to 2009.	guage of assessment: German, English								
	other prerequisit		tive details at the beg on to assessment. If s the lecturer will put th sessment in the curre	tain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respected details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admissito assessment. If students have obtained the qualification for admission to assessment over the course of the semester, electurer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assement in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualitation for admission to assessment anew.								
11-IEM-111-m01	Introduction to E	lectron	Microscopy									
	ECTS 4 C	Duration	1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses		V + R (no information	on SWS (weekly contact hours) and course lar	nguage available)							
			prox. 30 minutes per of to 10 pages, time to co Assessment offered: V nounced in due form of 2009. Language of assessment		credits approx. 20 minute ninar presentation (approx ed depends on the method ASPO (general academic a	s) or c) project report (approx. 8 k. 30 minutes) d of assessment and will be anand examination regulations)						
	other prerequisit		tive details at the beg on to assessment. If s the lecturer will put th	must be met to qualify for admission to asses inning of the course. Registration for the course tudents have obtained the qualification for acteir registration for assessment into effect. Stunt or in the subsequent semester. For assessito assessment anew.	se will be considered a de dmission to assessment o udents who meet all prerec	claration of will to seek admissiver the course of the semester, quisites will be admitted to as-						
11-FKS2-132-m01	Solid State Spect	troscop	y 2									
	ECTS 6	Duration		Method of grading numerical grade	Modul level	graduate						
	Courses			on SWS (weekly contact hours) and course lar	<u> </u>							
	Method of assess	sment	prox. 30 minutes per of on/seminar presentat Assessment offered: V	n (approx. 90 minutes) or b) oral examination candidate) or c) project report (approx. 8 to 10 tion (approx. 30 minutes) When and how often assessment will be offere under observance of Section 32 Subsection 3 ent: German, English	pages, time to complete: ed depends on the method	1 to 4 weeks) or d) presentati- d of assessment and will be an-						

11-PMM-132-m01	Physics	of Adv	anced Ma	terials	,	,					
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	5		V + R	(no information on	SWS (weekly contact	t hours) and course language av	/ailable)			
	Method	l of asso	essment	prox. on/se Asses nound 2009.	written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (appox. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) sessment offered: When and how often assessment will be offered depends on the method of assessment and will be anunced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) o9. nguage of assessment: German, English						
11-EXP6-111-mo1	Current	Topics	in Physic			, 0					
		6	Duration		1 semester Method of grading numerical grade Modul level graduate						
	Courses	5		V + R	no information on	SWS (weekly contact	t hours) and course language av	/ailable)			
	Method	l of asse	essment	specif modu weeks	a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless other specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English						
	other p	rerequis	sites	Appro	val by examinatio	n committee required					
11-EXE6A-112-mo1	Current	Topics	of Experi	menta	l Physics						
	ECTS	6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses						t hours) and course language av				
	Method	l of asse	essment	prox. to 10	a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 o 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) anguage of assessment: German, English						
	other p	er prerequisites Approval by examination committee required.									

Astrophysics and I	, 	article Physics (Experiment) Experimental Particle Physics												
11-11 12-092-11101	ECTS	4	Duration		1 semester	Method of grading nu	 Imerical grade	Modul level	graduate					
	Course	<u> </u>					urs) and course language av		, , , , , , , , , , , , , , , , , , , ,					
	Method	d of ass	essment	prox. to 10 Asses nound 2009	anguage of assessment: German, English									
	other p	rerequi	sites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the responsive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semeste he lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualication for admission to assessment anew.									
11-WWB-102-m01	Strong Interaction in Accelerator Experiments													
	ECTS	3	Duration	1	1 semester	Method of grading nu	ımerical grade	Modul level	graduate					
	Course	:S		V + R	/ + R (no information on SWS (weekly contact hours) and course language available)									
	Method	d of ass	essment	prox. to 10 Asses nound 2009	30 minutes per ca pages, time to cor ssment offered: W ced in due form ur	ndidate, for modules with nplete: 1 to 4 weeks) or d) nen and how often assess	less than 4 ECTS credits appresentation/seminar presement will be offered depend	prox. 20 minute entation (approx Is on the metho	oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations)					
	other p	rerequi	sites	tive d on to the le sessn	letails at the begin assessment. If stu ecturer will put the nent in the current	ning of the course. Regist Idents have obtained the Ir registration for assessm	ration for the course will be on the course will be on the course who entine to the cours who entine to the cours who entine to the cours who entine to the course which the course will be course with the course will be compared to the course will be compared with the course will be compared to the course will be course will be compared to the course will be compared to the cou	considered a de to assessment c o meet all prere	ofform students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-					

11-A4-072-m01	Astrophysics	1									
	ECTS 6	Duratio	n	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Courses		V + S	(no information o	n SWS (weekly contac	t hours) and course language av	ailable)	•			
	Method of ass	sessment	writte	n examination (ap	prox. 120 minutes)						
	other prerequ	isites	to qua cours obtain for as								
	Participants a cation of place		Only a	as part of pool of g	general key skills (AS	(1): 15 places. Places will be alloc	ated by lot.				
11-APP-111-m01	Practical Course Astrophysics										
	ECTS 6	Duratio	n	1 semester	Method of grading	(not) successfully completed	Modul level	graduate			
	Courses	•	P (no	information on SV	VS (weekly contact ho	ours) and course language availa	ble)				
	Method of ass	sessment	sed. E stand Asses nound 2009.								
	other prerequ	isites	tive d on to the le sessn	etails at the begin assessment. If stu cturer will put the nent in the current	ning of the course. Red adents have obtained ir registration for asse	egistration for the course will be the qualification for admission to essment into effect. Students wh	considered a de to assessment c o meet all prere				

11-ASP-092-m01	Introduction to Space Physics												
	ECTS	6	Duration		1 semester	Method of gradin	g numerical grade		Modul level	graduate			
	Course	s	F	R + V ((no information or	SWS (weekly conta	ct hours) and course langua	age ava	ilable)				
	Method	d of asse	r 2	orox. 3 30 10 p Asses 10unc 2009.	anguage of assessment: German, English								
	other p	rerequis	t c t	ive de on to a the lea sessm	etails at the begin assessment. If stu cturer will put thei eent in the current	ning of the course. Red dents have obtained r registration for ass	egistration for the course will the qualification for admis essment into effect. Studen	vill be cossion to to this who	onsidered a de assessment o meet all prere	form students about the respec- eclaration of will to seek admissi- ver the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-			
11-AWP-092-m01	Atmosphere and Space Physics												
	ECTS	6	Duration		1 semester	Method of gradin	g numerical grade		Modul level	graduate			
	Course	S	F	R + V (no information or	SWS (weekly conta	ct hours) and course langua	age ava	ilable)				
	Method	d of asse	r / r 2	orox. 3 nar pro Asses nounc 2009.	30 minutes per ca esentation (appro sment offered: Wh ed in due form un	ndidate) or c) projec x. 30 minutes) ien and how often a	t report (approx. 8 pages, tinessessment will be offered deceion 32 Subsection 3 ASPO	me to o	complete: 1 to 2	oral examination in groups (ap- 4 weeks) or d) presentation/semi- d of assessment and will be an- and examination regulations)			
	other p	rerequis	t c t	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-DTS-111-m01	Particle Radiation Detectors												
	ECTS	4	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + Ü	(no information or	n SWS (weekly contact	hours) and course language av	ailable)					
	Method	l of asse		prox. to 10 p Asses nound 2009.	anguage of assessment: German, English								
	other p	rerequis		tive do on to the le	ertain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, are lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualication for admission to assessment anew.								
11-MAS-111-m01	Modern Astrophysics												
	ECTS	4	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + R	(no information or	SWS (weekly contact	hours) and course language av	ailable)					
	Method	l of asse		prox. to 10 p Asses nound 2009.	Language of assessment: German, English								
	other p	rerequis		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-TPS-092-m01	Particle	e Physic	s (Standa	rd Mo	del)									
	ECTS	8	Duration	1	1 semester	Method of grading	numerical gra	ade	Modul level	graduate				
	Course	S		R + V (no information o	n SWS (weekly contact	hours) and co	urse language ava	ailable)					
	Method	d of ass		prox. 3 to 10 p Asses nounc 2009.	go minutes per ca pages, time to cor sment offered: W ed in due form ur	andidate, for modules mplete: 1 to 4 weeks) o hen and how often ass	with less than a or d) presentation sessment will b	4 ECTS credits app on/seminar prese e offered depend	prox. 20 minute entation (appro s on the metho	roral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) od of assessment and will be anand examination regulations)				
	other p	rerequi		tive de on to a the lea	etails at the begin assessment. If stu cturer will put the nent in the current	nning of the course. Re udents have obtained ir registration for asse	gistration for th the qualificatio ssment into eff	ne course will be on for admission to ect. Students who	considered a de o assessment e o meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali-				
11-ASM-131-m01	Astron	omical I	Methods											
	ECTS	6	Duration)	1 semester	Method of grading	numerical gra	ade	Modul level	graduate				
	Course	S		V + R (+ R (no information on SWS (weekly contact hours) and course language available)									
	Method	d of ass		prox. 3 on/se Asses nounc 2009.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequi		tive de on to a the lea	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-EXE6A-112-mo1	Current	t Topics	of Experi	mental	Physics									
	ECTS	6	Duration	1	1 semester	Method of grading	numerical gra	ade	Modul level	graduate				
	Course	S		V + R (/ + R (no information on SWS (weekly contact hours) and course language available)									
	Method	d of ass		prox. to 10 p	a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English									
	other p	rerequi	sites	Appro	val by examinatio	on committee required	•							

11-EXP6-111-mo1	Curren	t Topics	in Physic	S										
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	s		V + R	(no information on	SWS (weekly contact	hours) and course language ava	ailable)	•					
	Method	d of ass	essment	specif modu weeks	written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise pecified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for odules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 eeks) or d) presentation/seminar presentation (approx. 30 minutes) unguage of assessment: German, English									
	other p	rerequi	sites	Appro	proval by examination committee required.									
Complex Systems,	Quantu	uantum Control and Biophysics (Experiment)												
11-BMT-092-m01	Biophy	sical M	easureme	nt Tec	hnology in Medical	y in Medical Science								
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	S		R + V	(no information on	SWS (weekly contact	hours) and course language av	ailable)						
	Method	d of ass	essment	prox. to 10 Asses nounc 2009. Langu	anguage of assessment: German, English									
	other p	rerequi	sites	on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-LMB-092-m01	Laboratory and Measurement Technology in Biophysics												
	ECTS	6	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V ((no information on S	SWS (weekly contact	hours) and course language ava	ailable)					
	Method	l of ass		prox. to 10 p Asses nounc 2009.	go minutes per cand pages, time to comp sment offered: Whe ed in due form und	didate, for modules welete: 1 to 4 weeks) or n and how often asservance of Sec	vith less than 4 ECTS credits app rd) presentation/seminar prese	prox. 20 minute entation (approx s on the metho	d of assessment and will be an-				
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admiss on to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qual fication for admission to assessment anew.									
11-NOP-092-m01	Nano-O	ptics											
	ECTS 4 Duratio				1 semester Method of grading numerical grade Modul level graduate								
	Course	S		R + V ((no information on S	SWS (weekly contact	hours) and course language ava	ailable)					
	Method	l of ass		prox. 3 to 10 p Asses nounc 2009.	go minutes per cand pages, time to comp sment offered: Whe ed in due form und	didate, for modules welete: 1 to 4 weeks) or n and how often asservance of Sec	vith less than 4 ECTS credits ap r d) presentation/seminar prese	prox. 20 minute entation (approx s on the metho	d of assessment and will be an-				
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-SDC-092-m01	Statisti	cs, Dat	a Analysis	s and C	omputer Physics						
	ECTS	4	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S	•	R + V	no information or	SWS (weekly contact	hours) and course language	available)			
	Method	l of asso	essment	prox. to 10 Asses nound 2009.	30 minutes per ca pages, time to con sment offered: Wh ced in due form un	ndidate, for modules v nplete: 1 to 4 weeks) o nen and how often ass	with less than 4 ECTS credits r d) presentation/seminar pr essment will be offered depo	approx. 20 minute resentation (approxends on the metho	oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations)		
	other p	rerequi		tive d on to the le sessn	etails at the begin assessment. If stu cturer will put thei nent in the current	ning of the course. Reg dents have obtained t r registration for asses	gistration for the course will he qualification for admissic sment into effect. Students	be considered a de on to assessment o who meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-		
11-EXE6A-112-m01	Current	Topics	of Experi	menta	l Physics						
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S		V + R	(no information or	SWS (weekly contact	hours) and course language	available)			
	Method	l of asso	essment	prox. to 10	a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English						
	other p	rerequi	sites	Appro	val by examinatio	n committee required.					
11-EXP6-111-m01	Current	Topics	in Physic	:s							
	ECTS	6	Duration		1 semester	Method of grading		Modul level	graduate		
	Courses	S		V + R (no information on SWS (weekly contact hours) and course language available)							
	Method	l of asso	essment	specif modu weeks	a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English						
	other p	rerequi	sites	Appro	val by examinatio	n committee required.					

Current Topics in E	xperimental Phy	sics										
11-EXE5-111-mo1	Current Topics	in Experi	mental Physics									
	ECTS 5	Duration	1 semester	Method of gradin	g numerical grade	Modul level	graduate					
	Courses		V + R (no informatio	n on SWS (weekly conta	ct hours) and course languag	e available)						
	Method of asse	ssment	specified) or b) oral modules with less t weeks) or d) presen	written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise ecified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for odules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 eks) or d) presentation/seminar presentation (approx. 30 minutes) arguage of assessment: German, English								
	other prerequis	ites	Approval by examin	oproval by examination committee required.								
11-EXE6-111-mo1	Current Topics	in Experi	mental Physics									
	ECTS 6	Duration	1 semester	Method of gradin	g numerical grade	Modul level	graduate					
	Courses		V + R (no informatio	n on SWS (weekly conta	ct hours) and course languag	e available)						
	Method of asse	ssment	specified) or b) oral modules with less t weeks) or d) presen) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise pecified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for nodules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 yeeks) or d) presentation/seminar presentation (approx. 30 minutes) anguage of assessment: German, English								
	other prerequis	ites	Approval by examin	ation committee require	d.							
11-EXE7-111-mo1	Current Topics in Experimental Physics											
	ECTS 7	Duration	1 semester	Method of gradin	Modul level	graduate						
	Courses		V + R (no information on SWS (weekly contact hours) and course language available)									
	Method of asse		specified) or b) oral modules with less t weeks) or d) presen	examination of one can han 4 ECTS credits appro	didate each or oral examinati	on in groups (appro	ox. 90 minutes; unless otherwise ox. 30 minutes per candidate, for 10 pages, time to complete: 1 to 4					
	other prerequis	ites	Approval by examin	ation committee require	d.							
11-EXE8-111-mo1	Current Topics	in Experi	mental Physics									
	ECTS 8	Duration	1 semester	Method of gradin	g numerical grade	Modul level	graduate					
	Courses		V + R (no informatio	n on SWS (weekly conta	ct hours) and course languag	e available)						
	Method of asse	ssment	a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English									
	other prerequis	ites	Approval by examination committee required.									

11-EXE6A-112-mo1	Current	Topics	of Experi	menta	l Physics						
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S		V + R	(no information o	n SWS (weekly contact	hours) and course lan	guage available)			
	Method	of ass	essment						or oral examination in groups (ap-		
									es) or c) project report (approx. 8		
						mplete: 1 to 4 weeks) c ent: German, English	or d) presentation/sem	inar presentation (appro	ix. 30 minutes)		
	other p	rerequi	sites	Appro	oval by examinati	on committee required					
11-EXP6-111-m01	Current	Topics	in Physic	:s				-			
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S		V + R	(no information o	n SWS (weekly contact	hours) and course lan	guage available)			
	Method	l of ass	essment	speci modu week	written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless othe pecified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate odules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: eeks) or d) presentation/seminar presentation (approx. 30 minutes) anguage of assessment: German, English						
	other p	rerequi	sites	Appro	val by examinati	on committee required	•				
Theoretical Physics Students must achi		inimum	of 5 ECTS	credit	is.						
Applied Physics an	d Metrol	logy (Th	neory)								
11-EPP-092-m01	Introdu	ction to	Plasmap	hysics	5						
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses	S	-	V + R	(no information o	n SWS (weekly contact	hours) and course lan	guage available)			
	Method	l of ass	essment	prox. to 10 Asses nound	30 minutes per control pages, time to control sament offered: Worder in due form under the control page 200 minutes per control page	andidate, for modules mplete: 1 to 4 weeks) c /hen and how often ass	with less than 4 ECTS or d) presentation/sem sessment will be offere	credits approx. 20 minute inar presentation (appro ed depends on the metho	r oral examination in groups (apess) or c) project report (approx. 8 ex. 30 minutes) od of assessment and will be anand examination regulations)		
	other p	rerequi	sites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							

11-TDO-092-m01	Thermodynamics and Economics													
	ECTS	6	Duration		1 semester	Method of grading	numerical grade		Modul level	graduate				
	Courses	<u> </u>		R + V	(no information on	SWS (weekly contact	hours) and course	language av	ailable)					
	Method	d of asse		prox. to 10 Asses nound 2009.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
	other p	rerequis		tive d on to the le sessn										
11-TDOE-141-mo1	Thermo	odynami	cs and Ec	onomi										
	ECTS	3	Duration		1 semester	Method of grading	(not) successfully	completed	Modul level	graduate				
	Courses	S		V (no	/ (no information on SWS (weekly contact hours) and course language available)									
	Method of assessment			prox.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes)									
11-EXT6A-112-m01	Current	t Topics	of Theore	tical F	tical Physics									
	ECTS	6	Duration		1 semester	Method of grading	numerical grade		Modul level	graduate				
	Courses	 S		V + R	(no information on	SWS (weekly contact	hours) and course	language av	ailable)					
				prox. to 10 Langu	30 minutes per car pages, time to com lage of assessmen	ndidate, for modules v plete: 1 to 4 weeks) o t: German, English	vith less than 4 ECT r d) presentation/s	ΓS credits ap	prox. 20 minut	or oral examination in groups (apes) or c) project report (approx. 8 ox. 30 minutes)				
	other p	rerequis	ites	Approval by examination committee required.										
11-EXP6-111-m01	Current	t Topics	in Physic	S										
	ECTS	6	Duration		1 semester	Method of grading	numerical grade		Modul level	graduate				
	Courses	S		V + R	(no information on	SWS (weekly contact	hours) and course	language av	ailable)					
		d of asse		a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English										
	other p	rerequis	ites	Approval by examination committee required.										

Solid State Physics	s and Na	nostruc	tures (The	eory)									
11-QM2-092-m01	Quantu	ım Mecl	nanics II										
	ECTS	8	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	undergraduate				
	Course	S		R + V	R + V (no information on SWS (weekly contact hours) and course language available)								
	Method	d of asso		prox. to 10 p Asses nound 2009.	anguage of assessment: German, English								
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-QVTP-092-m01	Many Body Quantum Theory												
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V (no information on SWS (weekly contact hours) and course language available)									
	Method	d of asso		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other prerequisites			Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-RMS-092-m01	Relativistic Effects in Mesoscopic Systems											
	ECTS	5 Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5	R + V	(no information o	n SWS (weekly contac	t hours) and course language av	/ailable)					
	Method	of assessment	prox. to 10 Asses nound 2009.	Language of assessment: German, English								
	other pi	rerequisites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-TFK-092-m01	Theoretical Solid State Physics											
	ECTS	8 Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5	R + V	(no information o	n SWS (weekly contac	t hours) and course language av	/ailable)					
	Method	of assessment	prox. to 10 Asses nound 2009.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups of prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations 2009. Language of assessment: German, English								
	other pi	rerequisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-TSL-092-m01	Theory of Superconduction												
	ECTS 5	Duration	1 semester	Method of grading numerical grade	Modul level	graduate							
	Courses	R + \	(no information o	on SWS (weekly contact hours) and course l	anguage available)								
	Method of ass	prox to 10 Asse nour 200) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) assessment offered: When and how often assessment will be offered depends on the method of assessment and will be anounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) oog. anguage of assessment: German, English										
	other prerequ	tive on to the l sess ficat	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										
11-RMFT-102-m01	Renormalization Group Methods in Field Theory												
	ECTS 6	Duration	1 semester	Method of grading numerical grade	Modul level	graduate							
	Courses	V + F	(no information o	on SWS (weekly contact hours) and course l	anguage available)								
	Method of ass	prox to 10 Asse nour 2009	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in grou prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (ap to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulati 2009. Language of assessment: German, English										
	other prerequ	tive on to the l sess	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										

11-EEW-102-m01	Electron Electron Interaction												
	ECTS	4	Duration)	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S		V + R	(no information or	SWS (weekly contact	hours) and course language av	ailable)	-				
	Method	l of asse		prox. to 10 p Asses nound 2009.	Language of assessment: German, English								
	other p	rerequis		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-TFK2-111-m01	Theoretical Solid State Physics 2 ECTS 8 Duration 1 semester Method of grading numerical grade Modul level graduate												
	ECTS 8 Duratio								graduate				
	Courses	S		V + R	V + R (no information on SWS (weekly contact hours) and course language available)								
	Method	l of asse		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be ar nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequis		tive do on to the le	etails at the begin assessment. If stu cturer will put thei nent in the current	ning of the course. Reg Idents have obtained the Ir registration for asses	gistration for the course will be the qualification for admission t ssment into effect. Students wh	considered a de to assessment o o meet all prere	ofform students about the respec- eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as- ents will have to obtain the quali-				

11-CRP-131-mo1	Critical Phenomena												
	ECTS	6	Duratio	1	1 semester	Method of grad	ding numerical grad	de	Modul level	graduate			
	Course	!S		V + R	(no information or	n SWS (weekly con	tact hours) and cou	rse language av	ailable)				
	Method	d of ass	essment	tion (Assess noun 2009	a) written examination project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks), presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
	other p	orerequi	sites	tive d on to the le sessr									
11-UGS-131-m01	Disord	ered Sy	stems										
	ECTS	4	Duratio	n	1 semester	Method of grad	ding numerical grad	de	Modul level	graduate			
	Course	:S		V + R	(no information or	n SWS (weekly con	tact hours) and cou	rse language ava	ailable)				
	Method of assessment			prox. on/se Asses noun 2009 Langu	30 minutes per ca eminar presentatio ssment offered: Wh ced in due form un uage of assessmer	ndidate) or c) proj on (approx. 30 min hen and how often nder observance of ht: German, Englis	ect report (approx. 8 utes) a assessment will be f Section 32 Subsect h	3 to 10 pages, tir offered depend iion 3 ASPO (ger	ne to complete s on the metho neral academic	roral examination in groups (ap: 1 to 4 weeks) or d) presentation of assessment and will be anand examination regulations)			
	other prerequisites			tive d on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semesters.								
11-TFP-132-m01	Topolo	gy in So	olid State	Physic	S								
	ECTS	6	Duration		1 semester		ding numerical grad		Modul level	graduate			
	Course						tact hours) and cou						
	Method of assessment			a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									

11-TOPO-132-m01	Topolo	gical O	rder			,		,			
	ECTS	6	Duratio	n .	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + R	(no information or	SWS (weekly contact	hours) and course languag	ge available)			
	Method of assessment			prox. on/se Asses nound 2009	30 minutes per ca eminar presentation esment offered: Wl ced in due form ur	ndidate) or c) project ron n (approx. 30 minutes) nen and how often asso	eport (approx. 8 to 10 page essment will be offered de	es, time to complete pends on the metho	oral examination in groups (ap: 1 to 4 weeks) or d) presentatide of assessment and will be anand examination regulations)		
11-DFT-142-m01	Density	y Functi	onal Theo	ry and	the Physics of Ox	ride Heterostructure					
	ECTS	4	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		V + D	(no information or	n SWS (weekly contact	hours) and course languas	ge available)			
	Method of assessment			a) written examination (90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: approx. 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English							
11-FTFK-112-m01				ate Physics							
	ECTS	8	Duratio		1 semester	Method of grading		Modul level	graduate		
	Course						nours) and course languag	· · · · · · · · · · · · · · · · · · ·			
	Method	d of ass	essment	prox. to 10 Asses nound 2009	30 minutes per ca pages, time to cor sment offered: Wl ced in due form ur	ndidate, for modules welles wellete: 1 to 4 weeks) or the and how often assorter observance of Section 1.	oith less than 4 ECTS credit d) presentation/seminar essment will be offered de cion 32 Subsection 3 ASPC	ts approx. 20 minute presentation (approx pends on the metho) (general academic	d of assessment and will be an- and examination regulations)		
	other p	rerequi	sites	tive d on to the le sessn	etails at the begin assessment. If stu cturer will put the nent in the current	ning of the course. Reg idents have obtained the r registration for asses	istration for the course wil ne qualification for admiss sment into effect. Student	ll be considered a de sion to assessment o s who meet all prere	nform students about the respec- eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as- ents will have to obtain the quali-		

11-EXT6A-112-mo1	Current Topics of Theoretical Physics											
	ECTS	6	Duration	<u> </u>	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + R	no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass	essment	prox. to 10	30 minutes per can	ndidate, for modules v plete: 1 to 4 weeks) o		prox. 20 minute	r oral examination in groups (apss) or c) project report (approx. 8 x. 30 minutes)			
	other p	rerequi	sites	Appro	Approval by examination committee required.							
11-EXP6-111-m01	Current	Topics	in Physic	:s								
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + R	(no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass	essment	speci modu weeks	a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English							
	other p	rerequi	sites	Approval by examination committee required.								
Astrophysics and F	Particle F	hysics	(Theory)									
11-A4-072-m01	Astropl	hysics										
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	undergraduate			
	Course	S		V + S	(no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of ass	essment		n examination (app							
	other p	rerequi	sites	to qua cours obtain for as	Admission prerequisite to assessment: successful completion of approx. 50% of exercises. Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment an-							
	Particip cation (Only a	as part of pool of ge	eneral key skills (ASQ)	: 15 places. Places will be alloc	ated by lot.				

11-AKM-092-m01	Cosmol	Cosmology												
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	S		R + V	(no information on	SWS (weekly contact	hours) and course language	available)						
	Method	l of asse		prox. to 10 p Asses nound 2009.	30 minutes per car pages, time to com sment offered: Wh ced in due form und	ndidate, for modules wellete: 1 to 4 weeks) of en and how often assider observance of Sec	with less than 4 ECTS credits or d) presentation/seminar pro- essment will be offered depe	approx. 20 minute esentation (appro ends on the metho	oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations)					
	other p	rerequis		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										
11-APL-092-m01	Plasma	-Astrop	hysics											
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate					
	Course	s		R + V	(no information on	SWS (weekly contact	hours) and course language	available)						
	Method	l of asse	essment	prox. to 10 p Asses nound 2009.	30 minutes per car pages, time to com sment offered: Wh ced in due form und	ndidate, for modules wellete: 1 to 4 weeks) of en and how often assider observance of Sec	with less than 4 ECTS credits or r d) presentation/seminar pro essment will be offered depe	approx. 20 minute esentation (appro ends on the metho	oral examination in groups (apes) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be anand examination regulations)					
	other p	rerequis		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										

11-ASP-092-m01	Introdu	ction to	Space Pl	nysics								
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		R + V	(no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of asse		prox. to 10 p Asses nound 2009.	anguage of assessment: German, English							
	other p	rerequis		on to the le	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respecive details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, he lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
11-EPP-092-m01	Introduction to Plasmaphysics											
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + R	(no information on	SWS (weekly contact	hours) and course language av	ailable)				
	Method	d of asse	essment	prox. to 10 p Asses nound 2009.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approto 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations 2009. Language of assessment: German, English							
	other p	rerequis		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

11-GRT-092-m01	Group Theory												
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V	(no information on	SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass		prox. to 10 p Asses nound 2009.	Language of assessment: German, English								
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-NMA-111-mo1	Computational Astrophysics												
	ECTS 6 Duratio			1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + R	(no information on	SWS (weekly contact	hours) and course language av	ailable)					
	Method	d of ass		prox. on/se Asses nound 2009.	30 minutes per can minar presentation sment offered: Wh ced in due form und	ndidate) or c) project r n (approx. 30 minutes) en and how often assi der observance of Sec	eport (approx. 8 to 10 pages, tin)	me to complete: Is on the metho	d of assessment and will be an-				
	other p	rerequi		on to the le	etails at the beginn assessment. If stuc cturer will put their nent in the current o	ling of the course. Reg dents have obtained t registration for asses	gistration for the course will be a he qualification for admission t ssment into effect. Students who	considered a de to assessment o o meet all prere	form students about the respectoration of will to seek admissiver the course of the semester, quisites will be admitted to asnts will have to obtain the quali-				

11-QFT2-092-m01	Quantu	m Field Theory I										
	ECTS	6 Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses			<u>`</u>		t hours) and course language						
	Method	of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other pr	rerequisites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-SUS-092-m01	Supersymmetry I and II											
	ECTS	6 Duratio	n	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	5	V + R	V + R (no information on SWS (weekly contact hours) and course language available)								
	Method	of assessment	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in grou prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (ap to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulati 2009. Language of assessment: German, English									
	other pr	erequisites	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-RNT-092-m01	Renorm	Renormalization Theory												
	ECTS	6	Duration	1 semester	Method of grading numerical grade		Modul level	graduate						
	Course	S	R +	R + V (no information on SWS (weekly contact hours) and course language available)										
	Method	d of asse	prox to 1 Ass nou 200	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English										
	other p	rerequis	tive on t the ses	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										
11-RQFT-092-m01	Relativistical Quantumfield Theory													
	ECTS	8	Duration	1 semester	Method of grading numerical grade		Modul level	graduate						
	Course	S	R +	/ (no information on	n SWS (weekly contact hours) and course l	anguage av	ailable)							
	Method	d of asse	pros to 1 Ass nou 200	k. 30 minutes per car o pages, time to com essment offered: Wh nced in due form un	approx. 90 minutes) or b) oral examination andidate, for modules with less than 4 ECTs applete: 1 to 4 weeks) or d) presentation/sepen and how often assessment will be offer der observance of Section 32 Subsection at: German, English	S credits appeminar prese ered depend	prox. 20 minute entation (approx Is on the metho	es) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be an-						
	other p	rerequis	tive on t the ses	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										

11-RTT-092-m01	Theory of Relativity												
	ECTS	6	Duration	1	1 semester	Method of gradir	ng numerical grade		Modul level	graduate			
	Courses	S	R	+ V (r	no information on	SWS (weekly conta	ct hours) and course	language ava	ailable)				
	Method	l of asse	pi to As no	prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequis	tiv or th	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-TEP-092-m01	Theoretical Elementary Particle Physics												
	ECTS	8	Duration	1	1 semester	Method of gradir	ng numerical grade		Modul level	graduate			
	Courses	S	R	+ V (r	no information on	SWS (weekly conta	ct hours) and course	language ava	ailable)				
	Method	l of asse	pi to As no	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (a prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be a nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English						es) or c) project report (approx. 8 x. 30 minutes) d of assessment and will be an-			
	other p	rerequis	tiv or th	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-TPS-092-m01	Particle	e Physi	cs (Standa	ard Mo	del)			1					
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V	R + V (no information on SWS (weekly contact hours) and course language available)								
	Method	d of ass	essment	prox. to 10 Asses nound 2009.	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English								
	other p	rerequi	isites	tive d on to the le sessn	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								
11-AST-092-m01	Theore	tical As	trophysic	s									
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V	(no information o	n SWS (weekly contact	hours) and course language	available)					
	Method	d of ass	essment	nent written examination (approx. 120 minutes)									
11-ETT-111-m01	Introdu	iction t	o Element	ary Particle Theory									
	ECTS	4	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V (no	information on S\	VS (weekly contact ho	urs) and course language ava	ilable)					
				prox. to 10 Asses nound 2009 Langu	30 minutes per ca pages, time to con ssment offered: W ced in due form un uage of assessme	andidate, for modules of mplete: 1 to 4 weeks) of hen and how often assumer observance of Securit: German, English	with less than 4 ECTS credits or d) presentation/seminar prosessment will be offered depe ction 32 Subsection 3 ASPO (s	approx. 20 minute esentation (appro ends on the metho general academic	od of assessment and will be an- and examination regulations)				
	other prerequisites			Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-QSG-102-m01	Quantui	Quantum Loop Gravity											
	ECTS	4	Duration	1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses	5	V +	V + S (no information on SWS (weekly contact hours) and course language available)									
	Method	of asse	b) c less c) p d) p Lan Ass	written examination (approx. 90 minutes) or or oral examination in groups (approx. 30 minutes per candidate, for modules with ess than 4 ECTS credits approx. 20 minutes) or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or or or project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or									
	other pr	rerequis	tive on the ses	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-MAS-111-mo1	Modern Astrophysics												
	ECTS	4	Duration	1 semester	Method of grading numerical grade	Modul level	graduate						
	Courses	5	V +	R (no information or	n SWS (weekly contact hours) and course lar	nguage available)							
			pro to 1 Ass nou 200 Lan	x. 30 minutes per ca to pages, time to con sessment offered: Wh unced in due form un og. Iguage of assessmer		credits approx. 20 minut ninar presentation (appro ed depends on the metho ASPO (general academic	es) or c) project report (approx. 8 ix. 30 minutes) od of assessment and will be anand examination regulations)						
	other prerequisites			e details at the begin to assessment. If stu lecturer will put thei sment in the current	ust be met to qualify for admission to asses ining of the course. Registration for the cour- udents have obtained the qualification for a ir registration for assessment into effect. Stu t or in the subsequent semester. For assessr o assessment anew.	se will be considered a d dmission to assessment udents who meet all prere	eclaration of will to seek admissi- over the course of the semester, equisites will be admitted to as-						

11-ATT-111-m01	Concepts of Theoretical Astroparticle physics												
	ECTS 4	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate						
	Courses	V +	R (no information on	SWS (weekly contact	hours) and course language av	ailable)							
	Method of ass	pro to 1 Ass nou	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.										
	other prerequi	tive on the ses	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										
11-ART-112-mo1	General Theory of Relativity												
	ECTS 4	Duration											
	Courses	V +	R (no information on	SWS (weekly contact	hours) and course language av	ailable)							
	Method of ass	pro to 1 Ass not	a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups prox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be nounced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations 2009.										
	other prerequi	tive on the ses	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.										

11-SRT-112-m01	Special	Theory	of Relativ	vity					,	
	ECTS	4	Duration	1	1 semester	Method of grading numerical grade		Modul level	graduate	
	Course	S		V + R	(no information on	SWS (weekly contact hours) and course la	anguage avai	ilable)		
	Method	l of asse		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.						
	other p	rerequi		on to the le	etails at the beginn assessment. If stuc cturer will put their nent in the current o	st be met to qualify for admission to asse ling of the course. Registration for the cou dents have obtained the qualification for a registration for assessment into effect. St or in the subsequent semester. For assess assessment anew.	urse will be co admission to tudents who	onsidered a de assessment o meet all prere	eclaration of will to seek admissi- over the course of the semester, quisites will be admitted to as-	
11-EXT6A-112-mo1	Current	Topics	of Theore	tical P	hysics					
	ECTS 6 Duratio			ì	1 semester	Method of grading numerical grade		Modul level	graduate	
	Course	S		V + R	(no information on	SWS (weekly contact hours) and course la	anguage avai	ilable)		
	Method	d of asso		a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English						
	other p	rerequi	sites	Approval by examination committee required.						
11-EXP6-111-mo1	Current	Topics	in Physic	S						
	ECTS 6 Duration				1 semester	Method of grading numerical grade		Modul level	graduate	
	Course	S		V + R	(no information on	SWS (weekly contact hours) and course la	anguage avai	ilable)		
	Method	l of asso		a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English						
	other prerequisites			Approval by examination committee required.						

Complex Systems,	Quantui	m Contr	ol and Bio	physic	cs (Theory)								
11-PKS-092-m01	Physics	s of Con	ıplex Sys	tems									
	ECTS	6	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V (R + V (no information on SWS (weekly contact hours) and course language available)								
	Method	d of asso		prox. 1 to 10 p Asses nound 2009.	Language of assessment: German, English								
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									
11-QIC-092-m01	Quantum Information and Quantum Computing												
	ECTS 5 Duratio			ı	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		R + V (no information on SWS (weekly contact hours) and course language available)									
	Method	d of asso		a) written examination (approx. 90 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009. Language of assessment: German, English									
	other p	rerequi		Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.									

11-EXP6-111-m01	Curren	t Topics	in Physic	S								
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	:S		V + R	(no information or	SWS (weekly contact	hours) and course language	available)				
	Metho	d of ass	essment	speci modu week	written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise pecified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for nodules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 reeks) or d) presentation/seminar presentation (approx. 30 minutes) anguage of assessment: German, English							
	other p	rerequi	sites	Appro	oval by examinatio	n committee required.						
11-EXT6A-112-mo1	Curren	t Topics	of Theore	etical	Physics	· · · · · · · · · · · · · · · · · · ·						
	ECTS	6	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Courses			V + R	no information or	SWS (weekly contact	hours) and course language	available)	•			
	Metho	d of ass	essment	prox. to 10	written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (aprox. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) anguage of assessment: German, English							
	other p	rerequi	sites	Appro	oval by examinatio	n committee required.	•					
Current Topics in T	heoretic	al Phys	ics									
11-EXT5-111-m01	Current Topics in Theoretical Physics											
	ECTS	5	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!S		V + R	(no information or	SWS (weekly contact	hours) and course language	available)				
	Method of assessment			speci modu week	fied) or b) oral exa lles with less than s) or d) presentatio	mination of one candi 4 ECTS credits approx	date each or oral examination	n in groups (appro	rox. 90 minutes; unless otherwise ox. 30 minutes per candidate, for 10 pages, time to complete: 1 to 4			
	other p	rerequi	sites	Appro	oval by examinatio	n committee required.						
11-EXT6-111-mo1	Curren	t Topics	in Theore	etical I	Physics							
	ECTS	6	Duratio	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	!S		V + R	(no information or	SWS (weekly contact	hours) and course language	available)				
	Method of assessment			speci modu week Langi	fied) or b) oral exa ıles with less than s) or d) presentatio uage of assessmen	mination of one candi 4 ECTS credits approx on/seminar presentati it: German, English	date each or oral examinatior . 20 minutes) or c) project rep on (approx. 30 minutes)	n in groups (appro	rox. 90 minutes; unless otherwise ox. 30 minutes per candidate, for 10 pages, time to complete: 1 to 4			
	other prerequisites			Approval by examination committee required.								

11-EXT7-111-m01	Current	Topics	in Theore	etical F	hysics	,							
	ECTS	7	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S		V + R	(no information o	on SWS (weekly contac	t hours) and course language a	vailable)					
	Method	l of asse	essment	speci modu weeks	a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwispecified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English								
	other p	rerequis	sites	Appro	oval by examinati	on committee required							
11-EXT8-111-m01	Current Topics in Theoretical Physics												
	ECTS	8	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S		V + R	(no information o	on SWS (weekly contac	t hours) and course language a	vailable)					
	Method	l of asse	essment	speci modu weeks	a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwisspecified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English								
	other p	rerequi	sites	Appro	val by examinati	on committee required							
11-EXP6-111-m01	Current Topics in Physics												
	ECTS	6	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	S		V + R	(no information of	on SWS (weekly contac	t hours) and course language a	vailable)					
	Method	l of asse	essment	a) written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless specified) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per cand modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to comp weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English									
	other p	rerequi	sites	Approval by examination committee required.									
11-EXT6A-112-m01	Current	Topics	of Theore	etical F	hysics								
	ECTS	6	Duration	า	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Courses	 S		V + R	(no information o	on SWS (weekly contac	t hours) and course language a	vailable)					
	Method	of asse	essment	a) written examination (approx. 120 minutes) or b) oral examination of one candidate each or oral examination in groups (approx. 30 minutes per candidate, for modules with less than 4 ECTS credits approx. 20 minutes) or c) project report (approx. 8 to 10 pages, time to complete: 1 to 4 weeks) or d) presentation/seminar presentation (approx. 30 minutes) Language of assessment: German, English									
	other prerequisites			Approval by examination committee required.									

Mathematical Phys	sics											
10-M=MP1-122-	Analys	is and G	eometry	of Clas	sical Systems							
mo1	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method	d of ass	essment	(appronation	At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Language of assessment: German, English							
	other p	rerequi		tive do on to the le sessm	Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.							
10-M=MP2-122-	Algebra and Dynamics of Quantum Systems											
mo1	ECTS 10 Duratio		1	1 semester	Method of grading	numerical grade	Modul level	graduate				
	Course	S		V + Ü	V + Ü (no information on SWS (weekly contact hours) and course language available)							
	Method of assessment			At the beginning of the course, the lecturer will choose one of the following methods of assessment: a) written examination (approx. 90 to 120 minutes; usually chosen), b) oral examination of one candidate each (approx. 20 minutes), c) oral examination in groups of 2 candidates (approx. 30 minutes total) Language of assessment: German, English								
	other prerequisites			Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.								

Research Modules Students must ac					its.						
11-FM-TPE-092-					rimental Particle	Physics					
mo1	ECTS	8	Duratio	n	1 semester	Method o	of grading	numerical gr	ade	Modul level	graduate
	Course	S		man o Komp hours	Experimentelle Teilchenphysik (Experimental Particle Physics): V (2 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (details to be announced) Kompaktseminar Experimentelle Teilchenphysik (Block Taught Seminar Experimental Particle Physics): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method of assessment			1. Top	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)						
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year (details to be announced); details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.							
	other prerequisites			11-KE	Γ; recommended:	11-DTS, 11-TP	S				
11-FM-HLF-092-	FOKUS Research Module Semiconductor Lasers										
mo1	ECTS	10	Duration	n	1 semester	Method o	of grading	numerical gr	ade	Modul level	graduate
	Courses Method of assessment			conta Komp	Halbleiterlaser - Grundlagen und aktuelle Forschung (Semiconductor Lasers - Principles and Current Research): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (summer semester) Kompaktseminar Halbleiterlaser (Block Taught Seminar Semiconductor Lasers): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
				1. Top	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral ex amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)						
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year in the summer semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.							

11-FM-SPD-102-	FOKUS	Resea	rch Module	e Applied Semiconduct	or Physics and Devices					
mo1	ECTS	10	Duration	ı 1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	eS		Halbleiterphysik und Bauelemente (Applied Semiconductor Physics and Devices): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (winter semester) Kompaktseminar Halbleiterphysik und Bauelemente (Block Taught Seminar Applied Semiconductor Physics and Devices): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method	d of ass		 Topics covered in le amination of one ca Seminar: talk (approximate) Assessment compone Students must registe Assessment compone offered to be announced 	ndidate each or oral exacts. 30 to 45 minutes) nts 1 and 2 will be offerer for assessment compont 1 will be offered once ed.	ritten examination (approx. 90 amination in groups (approx. 30 ed in German or English. nents 1 and 2 online (details to a year in the winter semester; of	o minutes) or pro be announced) details on when	assessment component 2 will be		
				To pass this module, students must pass both assessment component 1 and assessment component 2.						
	other prerequisites			11-KM-2						
11-FM-TFK-092-	FOKUS Research Module Theoretical Solid State Physics									
mo1	ECTS	10	Duration		Method of grading	_	Modul level	graduate		
	Method of assessment			German or English, on Kompaktseminar Theo	ce a year (winter semes pretische Festkörperphys	sik (Block Taught Seminar Theo	retical Solid Sta	- Ü/P (2 weekly contact hours), ite Physics): S (2 weekly contact days), usually held during seme-		
				1. Topics covered in le	ctures and exercises: windidate each or oral exa	mponents ritten examination (approx. 90 m amination in groups (approx. 30	minutes) or talk o minutes) or pro	(approx. 30 minutes) or oral ex- oject report (approx. 8 pages)		
				Students must registe Assessment compone offered to be announce	r for assessment compo nt 1 will be offered once ed.	ed in German or English. nents 1 and 2 online (details to a year in the winter semester; on a assessment component 1 and	details on when	assessment component 2 will be		
	other p	rerequi	sites	Recommended: 11-KM	, 11-TQM	•				

11-FM-TSL-092-	FOKUS	Resear	ch Modul	e Theory	of Superconducti	vity	'		
mo1	ECTS	10	Duratio	1 1	semester	Method of grading numerical grade	Modul level	graduate	
	Courses			English, Kompak	, once a year (sum ktseminar Theorie	(Theory of Superconduction): V (2 weekly contact homer semester) der Supraleitung (Block Taught Seminar Theory of S s on availability to be announced (block taught sem	Superconduction	n): S (2 weekly contact hours),	
	Method of assessment			1. Topic amina	s covered in lectur	wing assessment components res and exercises: written examination (approx. 90 date each or oral examination in groups (approx. 30 30 to 45 minutes)			
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year in the summer semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.					
11-FM-AST-092-	FOKUS Research Module Theoretical Astrophysics								
mo1	ECTS	10	Duration	1 1	semester	Method of grading numerical grade	Modul level	graduate	
	Courses			Kompak	ktseminar Theoreti	(Theoretical Astrophysics): V (3 weekly contact hou ische Astrophysik (Block Taught Seminar Theoretica n availability to be announced (block taught semina	al Astrophysics):	S (2 weekly contact hours), Ger-	
	Method of assessment			1. Topic amina	s covered in lectur	wing assessment components res and exercises: written examination (approx. 90 date each or oral examination in groups (approx. 30 30 to 45 minutes)	minutes) or talk o minutes) or pro	(approx. 30 minutes) or oral ex- oject report (approx. 8 pages)	
				Student Details	s must register for on when assessm	will be offered in German or English. r assessment components 1 and 2 online (details to ent component 2 will be offered to be announced. lents must pass both assessment component 1 and			
	other p	rerequi	sites	Mechan	ics, electrodynam	ics, programming in C++; recommended: atomic, n	uclear and partic	cle physics, thermodynamics.	

11-FM-PKS-092-	FOKUS	Resea	rch Module	Complex Systems						
mo1	ECTS	10	Duration	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		Physik komplexer Systeme (Physics of Complex Systems): V (2 weekly contact hours) + Ü/P (2 weekly contact hours), German or English, once a year (winter semester) Kompaktseminar Komplexe Systeme (Block Taught Seminar Complex Systems): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method	d of ass		1. Topics covered in le	ollowing assessment components ctures and exercises: written examination (approx ndidate each or oral examination in groups (appro ox. 30 to 45 minutes)					
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered in the winter semester (details to be announced); details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						
11-FM-PKS-	FOKUS Research Module Complex Systems with Mini Research Project									
MF-092-m01	ECTS 12 Duratio			1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses			or English, once a year Kompaktseminar Kom lish, details on availab Miniforschungsprojekt English, details on ava	plexe Systeme (Block Taught Seminar Complex Systility to be announced (block taught seminar (3 day Komplexe Systeme (Mini Research Project Compli ilability to be announced (either block taught duri	stems): S (2 weekly (ys), usually held dur ex Systems): P (2 we	contact hours), German or Eng- ing semester break) ekly contact hours), German or			
	Method of assessment			 Topics covered in lea amination of one ca Seminar: talk (appro 	ollowing assessment components ctures and exercises: written examination (approx ndidate each or oral examination in groups (appro ox. 30 to 45 minutes) oject report (approx. 8 pages)					
				Students must register Assessment componer will be offered to be ar	nts 1 through 3 will be offered in German or English for assessment components 1 through 3 online (on the 1 will be offered once a year in the winter semes smounced. tudents must pass each of the assessment compo	details to be announ ster; details on when				

11-FM-LHQ-092-	FOKUS	Resear	ch Spintro	onic and Physics		,				
mo1	ECTS	10	Duration	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		Lithographieverfahren in der Halbleitertechnik und Theorie des Quantentransports (Lithography in Semiconductor Technology and Theory of Quantum Transport): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (winter semester) Kompaktseminar Spintronik und Nanophysik (Block Taught Seminar Spintronics and Nanophysics): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method of assessment			 Topics covered in lect amination of one cand Seminar: talk (approx Assessment component Students must register f 	lowing assessment components tures and exercises: written examination (ap didate each or oral examination in groups (a c. 30 to 45 minutes) ts 1 and 2 will be offered in German or Englis for assessment components 1 and 2 online (t 1 will be offered once a year in the winter se	approx. 30 minutes) or prosh. (details to be announced)	oject report (approx. 8 pages)			
				offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						
11-FM-RMS-092-	FOKUS Research Module Dirac Fermions in Mesoscopic Systems									
mo1	ECTS	9	Duration	1 semester	Method of grading numerical grade	Modul level	graduate			
	Courses			Ü/P (1 weekly contact ho Kompaktseminar Dirac F	Fermionen in Mesoskopischen Systemen (Bl tact hours), German or English, details on av	lock Taught Seminar Dira	c Fermions in Mesoscopic Sy-			
	Method of assessment		essment	1. Topics covered in lect	lowing assessment components tures and exercises: written examination (ap didate each or oral examination in groups (a k. 30 to 45 minutes)					
				Students must register f Details on when assessi	ts 1 and 2 will be offered in German or Englis for assessment components 1 and 2 online (ment component 2 will be offered to be anno udents must pass both assessment compon	(details to be announced) ounced.				

11-FM-RQFT-092-	FOKUS Research Module Relativistic Quantum Field Theory											
mo1	ECTS 12 Duratio	n 1 semester Method of grading numerical grade Modul level graduate										
	Courses	Relativistische Quantenfeldtheorie (Relativistic Quantum Field Theory): V (4 weekly contact hours) + Ü/P (2 weekly contact hours), German or English, once a year (winter semester) Kompaktseminar Relativistische Quantenfeldtheorie (Block Taught Seminar Relativistic Quantum Field Theory): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (1 to 3 days) held towards the end of semester break or at the beginning of the subsequent semester)										
	Method of assessment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)										
		Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year in the winter semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.										
	other prerequisites	ectures Theoretische Physik (Theoretical Physics); Quantenmechanik 2 (Quantum Mechanics 2) recommended.										
11-FM-RQFT-	FOKUS Research Module Relativistic Quantum Field Theory with Mini Research Project											
MF-092-m01	ECTS 16 Duration	n 1 semester Method of grading numerical grade Modul level graduate										
	Courses	Relativistische Quantenfeldtheorie (Relativistic Quantum Field Theory): V (4 weekly contact hours) + Ü/P (2 weekly contact hours), German or English, once a year (winter semester) Kompaktseminar Relativistische Quantenfeldtheorie (Block Taught Seminar Relativistic Quantum Field Theory): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (1 to 3 days) held towards the end of semester break or at the beginning of the subsequent semester) Miniforschungsprojekt Relativistische Quantenfeldtheorie (Mini Research Project Relativistic Quantum Field Theory): P (2 w kly contact hours), German or English, details on availability to be announced (either block taught during semester break o approx. 3 weeks part time)										
	Method of assessment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages)										
		Assessment components 1 through 3 will be offered in German or English. Students must register for assessment components 1 through 3 online (details to be announced). Assessment component 1 will be offered once a year in the winter semester; details on when assessment components 2 and 3 will be offered to be announced. To pass this module, students must pass each of the assessment components 1 through 3.										
	other prerequisites	Lectures Theoretische Physik (Theoretical Physics); Quantenmechanik 2 (Quantum Mechanics 2) recommended.										

11-FM-TEP-092-	FOKUS	Resear	ch Module	Theoretical Elementa	ary Particle Physics	,				
mo1	ECTS	12	Duration	1 semester	Method of grading numerical grade	e Mo	odul level	graduate		
	Course	S		Theoretische Elementarteilchenphysik (Theoretical Elementary Particle Physics): V (4 weekly contact hours) + Ü/P (2 weekly contact hours), German or English, once a year (summer semester) Kompaktseminar Theoretische Elementarteilchenphysik (Block Taught Seminar Theoretical Elementary Particle Physics): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (1 to 3 days) held towards the end of semester break or at the beginning of the subsequent semester)						
	Method of assessment			 Topics covered in learning amination of one cannot be a series and a series are a series and a series are a series and a s	following assessment components ectures and exercises: written examination andidate each or oral examination in grou rox. 30 to 45 minutes)	ips (approx. 30 min	utes) or talk nutes) or pro	(approx. 30 minutes) or oral ex- ject report (approx. 8 pages)		
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						
		rerequis		11-RQFT						
_	FOKUS Research Module Theoretical Elementary Particle Physics with Mini Research Project									
mo1	ECTS	16	Duration		Method of grading numerical grade		odul level	graduate		
	Course			Theoretische Elementarteilchenphysik (Theoretical Elementary Particle Physics): V (4 weekly contact hours) + Ü/P (2 weekly contact hours), German or English, once a year (summer semester) Kompaktseminar Theoretische Elementarteilchenphysik (Block Taught Seminar Theoretical Elementary Particle Physics): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually he during semester break) Miniforschungsprojekt Theoretische Elementarteilchenphysik (Mini Research Project Theoretical Elementary Particle Physics P (2 weekly contact hours), German or English, details on availability to be announced (either block taught during semester break or approx. 3 weeks part time)						
	Method of assessment			 Topics covered in learning amination of one cannot be sufficient to the sufficient of the sufficient to the	following assessment components ectures and exercises: written examination andidate each or oral examination in grou rox. 30 to 45 minutes) project report (approx. 8 pages) ents 1 through 3 will be offered in German er for assessment components 1 through 3	or English. 3 online (details to	nutes) or pro	ject report (approx. 8 pages)		
				Details on when assessment components 2 and 3 will be offered to be announced. To pass this module, students must pass each of the assessment components 1 through 3.						
	other p	rerequis	sites	11-RQFT						

11-FM-QPM-092-	FOKUS	Resear	rch Module	Quantum Phenomen	a in electronic correlate	d Materials					
mo1	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		Quantenphänomene in elektronisch korrelierten Materialien (Quantum Phenomena in Electronic Correlated Materials): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (details to be announced) Kompaktseminar Quantenphänomene in elektronisch korrelierten Materialien (Block Taught Seminar Quantum Phenomena in Electronic Correlated Materials): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)							
	Method of assessment			 Topics covered in leading to a mination of one can 	ectures and exercises: w	ritten examination (approx		x (approx. 30 minutes) or oral exoject report (approx. 8 pages)			
				Students must registe Assessment compone will be offered to be a	er for assessment compo ent 1 will be offered onco nnounced.	red in German or English. onents 1 and 2 online (deta e a year (details to be anno h assessment component 1	unced); details on w	hen assessment component 2			
11-FM-QPM-	FOKUS Research Module Quantum Phenomena in electronic correlated Materials with Mini Research Project										
MF-092-m01	ECTS	14	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		weekly contact hours) Kompaktseminar Qua Electronic Correlated taught seminar (3 day Miniforschungsprojek mena in Electronic Co) + Ü/P (1 weekly contac ntenphänomene in elek Materials): S (2 weekly o rs), usually held during s tt Quantenphänomene i rrelated Materials): P (2	t hour), German or English, ktronisch korrelierten Mater contact hours), German or E semester break) n elektronisch korrelierten	, once a year (details rialien (Block Taught English, details on av Materialien (Mini Re rman or English, deta	onic Correlated Materials): V (3 to be announced) Seminar Quantum Phenomena in vailability to be announced (block search Project Quantum Phenoails on availability to be announ-			
	Method of assessment			1. Topics covered in le amination of one ca 2. Seminar: talk (appr	ectures and exercises: w	vritten examination (approx amination in groups (appro		(approx. 30 minutes) or oral exoject report (approx. 8 pages)			
				Students must registe Assessment compone and 3 will be offered t	er for assessment compo ent 1 will be offered once to be announced.	offered in German or Englis onents 1 through 3 online (o e a year (details to be anno h of the assessment compo	details to be announ unced); details on w	ced). hen assessment components 2			

11-FM-LMB-092-	FOKUS	Resear	ch Module	Biophy	sics - Laboratory	and Measurement Techno	logy	1		
mo1	ECTS	10	Duration	1	semester	Method of grading num	erical grade	Modul level	graduate	
	Course	S		Labor- und Messtechnik in der Biophysik (Laboratory and Measurement Technology in Biophysics): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (summer semester) Kompaktseminar Biophysik - Labor- und Messtechnik (Block Taught Seminar Biophysics - Laboratory and Measurement Technology): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method of assessment			1. Topics	s covered in lectu ation of one cand		examination (approx. 90		(approx. 30 minutes) or oral exoject report (approx. 8 pages)	
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year in the summer semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						
11-FM-BMT-092-	FOKUS Research Module Biophysics - Biophysical Measurement Technology in Medical Science									
mo1	ECTS	10	Duration	1	semester	Method of grading num	erical grade	Modul level	graduate	
	Course	S		Biophysikalische Messtechnik in der Medizin (Biophysical Measurement Technology in Medical Science): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (winter semester) Kompaktseminar Biophysik - Biophysikalische Messtechnik in der Medizin (Block Taught Seminar Biophysics - Biophysical Measurement Technology in Medical Science): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method of assessment This 1. To a			This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)						
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year in the winter semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						

11-FM-NOP-092-	FOKUS	Resear	ch Module	Nano Optics							
mo1	ECTS	8	Duration	1 semester	Method of grading nume	erical grade	Modul level	graduate			
	Course	S		Nanoelektronik (Nanoelectronics): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (summer semester) Kompaktseminar Nanoelektronik (Block Taught Seminar Nanoelectronics): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)							
	Method	d of ass		This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)							
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Students must meet certain prerequisites to qualify for admission to assessment component 1. The lecturer will inform them about the respective details at the beginning of the course. Assessment component 1 will be offered once a year in the summer semester; details on when assessment component 2 will							
				be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.							
11-FM-QTH-102-	FOKUS Research Module Quantum Transport in Semiconductor Nanostructures										
mo1	ECTS	10	Duration	1 semester	Method of grading nume	erical grade	Modul level	graduate			
	Courses			hours) + Ü/P (1 weekly c Kompaktseminar Quanto Nanostructures): S (2 we (3 days), usually held du	ontact hour), German or Eng entransport in Halbleiternan ekly contact hours), German ring semester break)	lish, once a year (summe ostrukturen (Block Taugh n or English, details on av	er semester) It Seminar Quan	structures): V (3 weekly contact atum Transport in Semiconductor announced (block taught seminar			
	Method of assessment			This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)							
		,		Students must register f Assessment component be offered to be announ	s 1 and 2 will be offered in G or assessment components 1 will be offered once a year ced. dents must pass both asses	1 and 2 online (details to r in the summer semester	; details on who	en assessment component 2 will			

11-FM-NDS-092-	FOKUS	Resear	ch Module	Low Dimensional S	tructures					
mo1	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	ss		Niederdimensionale Strukturen (Low Dimensional Structures): V (2 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (details to be announced) Kompaktseminar Niederdimensionale Strukturen (Block Taught Seminar Low Dimensional Structures): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method	d of ass	:	 Topics covered ir amination of one Seminar: talk (ap Assessment compostudents must regis 	candidate each or oral exprox. 30 to 45 minutes) nents 1 and 2 will be offerester for assessment compo	ritten examination (approx. 90 amination in groups (approx. 30	o minutes) or pro			
				will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						
11-FM-MSS-102-	FOKUS Research Module Methods in Surface Spectroscopy									
mo1	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			Kompaktseminar (E	lock Taught Seminar) App	/ contact hours), usually Englis lications of Surface Spectrosco block taught seminar (3 days),	py: S (2 weekly	contact hours), German or Eng-		
	Method of assessment			This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)						
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year in the winter semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						
	other p	rerequi	sites	11-TQM, 11-KM2 , 11	FK2 (or 11-T3, 11-E5, 11-E7)					

11-FM-MSS-	FOKUS	Resear	ch Module	e Methods in Surface S	Spectroscopy with Min	i Research Project			
MF-102-m01	ECTS	12	Duration	1 semester	Method of grading	g numerical grade	Modul level	graduate	
	Course	S		Methods in Surface Spectroscopy: V (3 weekly contact hours), usually English, once a year (winter semester) Kosmologie (Cosmology): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English Kompaktseminar (Block Taught Seminar) Applications of Surface Spectroscopy: S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break) Miniforschungsprojekt zu Surface Spectroscopy (Mini Research Project Surface Spectroscopy): P (2 weekly contact hours)					
	Method of assessment			 Topics covered in le amination of one ca Seminar: talk (appr 	ectures and exercises: vandidate each or oral e	written examination (approx. 90 xamination in groups (approx. 30	minutes) or talk o minutes) or pr	(approx. 30 minutes) or oral exoject report (approx. 8 pages)	
				Assessment components 1 through 3 will be offered in German or English. Students must register for assessment components 1 through 3 online (details to be announced). Assessment component 1 will be offered once a year in the winter semester; details on when assessment components 2 and 3 will be offered to be announced. To pass this module, students must pass each of the assessment components 1 through 3.					
	other p	rerequi	sites	11-TQM, 11-KM2 , 11-FI	(2 (or 11-T3, 11-E5, 11-E	7)		-	
11-FM-HAS-111-	FOKUS	Resear	ch Module	e High Energy Astroph	ysics				
mo1	ECTS	10	Duration	1 semester	Method of gradin	g numerical grade	Modul level	graduate	
	Courses			Plasma-Astrophysik (Plasma-Astrophysics): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (summer semester) Kosmologie (Cosmology): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English Kompaktseminar Hochenergie-Astrophysik (Block Taught Seminar High Energy Astrophysics): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)					
	Method of assessment			This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)					
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Details on when assessment component 2 will be offered to be announced. Lectures and exercises will cover either plasma-astrophysics or cosmology (as announced by or agreed upon with the lecturer). To pass this module, students must pass both assessment component 1 and assessment component 2.					
	other p	rerequi	sites	11-A4, 11-KET					

11-FM-HAS-MF-111-	FOKUS	Resear	ch Module	High Energy Astrophys	sics with Mini Resea	rch Project				
mo1	ECTS	16	Duration	1 semester	Method of gradir	g numerical grade	Modul level	graduate		
	Course	S		a year (summer semest Kosmologie (Cosmolog Kompaktseminar Hoch man or English, details	er) y): V (3 weekly conta energie-Astrophysik on availability to be	ct hours) + Ü/P (1 weekly contac	t hour), German rgy Astrophysics) ar (3 days), usua	: S (2 weekly contact hours), Ger-		
	Method	d of ass		 This module has the following assessment components Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) Seminar: talk (approx. 30 to 45 minutes) Lab course (research project): a) Preparing, performing and evaluating the experiments will be considered successfully completed if a Testat (exam) is passed. Students will be given one opportunity to repeat experiments they did not pass. Or b) discussion to test the students' understanding of the physics-related contents and results of the experiment (approx. 20 minutes). 						
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 through 3 online (details to be announced). Details on when assessment component 2 will be offered to be announced. Lectures and exercises will cover either plasma-astrophysics or cosmology (as announced by or agreed upon with the lecturer). To pass this module, students must pass both assessment component 1 and assessment component 2.						
	other p									
11-FM-NOS-F-111-	FOKUS	Resear	ch Module	le Spectroscopy and Nano-Optics						
mo1	ECTS	10	Duration	1 semester	Method of gradir	g numerical grade	Modul level	graduate		
	Course			Festkörper-Spektroskopie (Solid State Spectroscopy): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), Ge English, once a year (summer semester) Kompaktseminar Nano-Optik und Spektroskopie (Block Taught Seminar Nano-Optics and Spectroscopy): S (2 week hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held dur ster break) This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 2. Seminar: talk (approx. 30 to 45 minutes)						
	Method	d of ass								
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year in the summer semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						
	other p	rerequi	sites	11-KM, 11-TQM						

11-FM-NOS-N-111-	FOKUS	Resear	ch Modul	e Nano-Optics and Spect	roscopy					
mo1	ECTS	8	Duration	ı 1 semester	Method of grading	numerical grade	Modul level	graduate		
	Course	S		Nano-Optik (Nano-Optics): V (2 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (summer semester) Kompaktseminar Nano-Optik (Block Taught Seminar Nano-Optics): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method	d of ass		This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)						
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Students must meet certain prerequisites to qualify for admission to assessment component 1. The lecturer will inform them about the respective details at the beginning of the course. Assessment component 1 will be offered once a year in the summer semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						
11-FM4-112-m01	FOKUS	Resear	ch Modul	e						
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	graduate		
	Courses			Ü/P (1 weekly contact h	our), German or Englis	h, details on availability to be a	innounced	arch): V (2 weekly contact hours) + or English, details on availability		
	Method	d of ass	essment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)						
				Details on when assess	or assessment compo ment components will	ed in German or English. nents 1 and 2 online (details to be offered to be announced. n assessment component 1 and				

11-FM6-112-m01	FOKUS Research Module											
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	25		FOKUS Vorlesung zu aktuellen Forschungsthemen (FOKUS Lecture on Topics in Current Research): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, details on availability to be announced FOKUS Kompaktseminar (FOKUS Block Taught Seminar): S (2 weekly contact hours), German or English, details on availability to be announced								
	Metho	d of ass	essment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Details on when assessment components will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.								
11-FM8-112-m01	EOVIIS	Pocosi	ch Modul	<u> </u>	ss tills illoudle, st	udents must pass both	assessment component 1 and	assessment co	inponent 2.			
11-FM6-112-11101	ECTS	OKUS Research Module CTS 12 Duration 1 semester Method of grading numerical grade Modul level graduate						graduato				
	Course		Daration	FOKU: Ü/P (2 FOKU:	S Vorlesung zu ak weekly contact h	tuellen Forschungsther lours), German or Engli	nen (FOKUS Lecture on Topics i sh, details on availability to be	in Current Resea announced	or English, details on availability			
	Metho	d of ass	essment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 mi amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (ap 2. Seminar: talk (approx. 30 to 45 minutes)								
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Details on when assessment components will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.								

11-FM4-MF-112-	FOKUS	Resea	rch Modul	e with Mini Research Pr	roject	,				
mo1	ECTS	12	Duration	n 1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		FOKUS Vorlesung zu aktuellen Forschungsthemen (FOKUS Lecture on Topics in Current Research): V (2 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, details on availability to be announced FOKUS Kompaktseminar (FOKUS Block Taught Seminar): S (2 weekly contact hours), German or English, details on availability to be announced FOKUS Miniforschungsprojekt (FOKUS Mini Research Project): P (2 weekly contact hours), German or English, details on availability to be announced						
	Method	d of ass	sessment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages) Assessment components 1 and 3 will be offered in German or English. Students must register for assessment components 1 and 3 online (details to be announced). Details on when assessment components will be offered to be announced.						
					tudents must pass each of the assessment co					
11-FM6-MF-112-	FOKUS	Resea	rch Modul	e with Mini Research Pr	roject					
mo1	ECTS	14	Duration	n 1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		FOKUS Vorlesung zu aktuellen Forschungsthemen (FOKUS Lecture on Topics in Current Research): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, details on availability to be announced FOKUS Kompaktseminar (FOKUS Block Taught Seminar): S (2 weekly contact hours), German or English, details on availability to be announced FOKUS Miniforschungsprojekt (FOKUS Mini Research Project): P (2 weekly contact hours), German or English, details on availability to be announced						
	Method	d of ass	essment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages)						
				Assessment components 1 and 3 will be offered in German or English. Students must register for assessment components 1 and 3 online (details to be announced). Details on when assessment components will be offered to be announced. To pass this module, students must pass each of the assessment components 1 through 3.						

11-FM8-MF-112-	FOKUS	Resear	ch Modul	e with Mini Research Pı	roject	"				
mo1	ECTS	16	Duration	n 1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		FOKUS Vorlesung zu aktuellen Forschungsthemen (FOKUS Lecture on Topics in Current Research): V (4 weekly contact hours) + Ü/P (2 weekly contact hours), German or English, details on availability to be announced FOKUS Kompaktseminar (FOKUS Block Taught Seminar): S (2 weekly contact hours), German or English, details on availability to be announced FOKUS Miniforschungsprojekt (FOKUS Mini Research Project): P (2 weekly contact hours), German or English, details on availability to be announced						
	Method	d of ass		This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages) Assessment components 1 and 3 will be offered in German or English. Students must register for assessment components 1 and 3 online (details to be announced). Details on when assessment components will be offered to be announced.						
				To pass this module, students must pass each of the assessment components 1 through 3.						
11-FM4A-112-m01			ch Modul							
	ECTS	8	Duration		Method of grading numerical grade	Modul level	graduate			
	Course	S		Ü/P (1 weekly contact I	ktuellen Forschungsthemen (FOKUS Lecture on hour), German or English, details on availability ar (FOKUS Block Taught Seminar): S (2 weekly o	y to be announced				
	Method	d of ass	essment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages). Seminar: talk (approx. 30 to 45 minutes)						
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Details on when assessment components will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.						

11-FM6A-112-m01	FOKUS Research Module											
	ECTS	10	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course	S		FOKUS Vorlesung zu aktuellen Forschungsthemen (FOKUS Lecture on Topics in Current Research): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, details on availability to be announced FOKUS Kompaktseminar (FOKUS Block Taught Seminar): S (2 weekly contact hours), German or English, details on availability to be announced								
	Method	d of ass	essment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Details on when assessment components will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.								
11-FM8A-112-m01	FOKUS	Resear	ch Modul	•	33 till3 illoudic, 3tt		assessment component 1 and		mponent 2.			
II I WO TIZ WOI	ECTS	12	Duration		1 semester	Method of grading	numerical grade	Modul level	graduate			
	Course			FOKUS Ü/P (2 FOKUS	weekly contact h	uellen Forschungsther ours), German or Engli	nen (FOKUS Lecture on Topics i sh, details on availability to be	n Current Resea announced	or English, details on availability			
	Method	d of ass	essment	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 2. Seminar: talk (approx. 30 to 45 minutes)								
				Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Details on when assessment components will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.								

11-FM4A-MF-112-	FOKUS	Mini R	esearch Pr	roject						
mo1	ECTS	12	Duration	1 semester	Method of grading numerical grade	Modul level	graduate			
	Course	S		FOKUS Vorlesung zu aktuellen Forschungsthemen (FOKUS Lecture on Topics in Current Research): V (2 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, details on availability to be announced FOKUS Kompaktseminar (FOKUS Block Taught Seminar): S (2 weekly contact hours), German or English, details on availability to be announced FOKUS Miniforschungsprojekt (FOKUS Mini Research Project): P (2 weekly contact hours), German or English, details on availability to be announced						
	Method	d of ass		This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages) Assessment components 1 and 3 will be offered in German or English. Students must register for assessment components 1 and 3 online (details to be announced). Details on when assessment components will be offered to be announced.						
514 (1 145				<u> </u>	tudents must pass each of the assessment con	mponents 1 through 3.				
11-FM6A-MF-112- mo1				e with Mini Research Pro						
IIIOI		14	Duration		Method of grading numerical grade	Modul level	graduate			
	Course	S		Ü/P (1 weekly contact h FOKUS Kompaktsemina to be announced	ktuellen Forschungsthemen (FOKUS Lecture on nour), German or English, details on availability ar (FOKUS Block Taught Seminar): S (2 weekly of projekt (FOKUS Mini Research Project): P (2 weunced	y to be announced contact hours), German	or English, details on availability			
	Method	d of ass		This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages)						
				Assessment components 1 and 3 will be offered in German or English. Students must register for assessment components 1 and 3 online (details to be announced). Details on when assessment components will be offered to be announced. To pass this module, students must pass each of the assessment components 1 through 3.						

11-FM8A-MF-112-	FOKUS	Resear	ch Module	with Mini	Research Pro	oject				
mo1	ECTS	16	Duration	1 1 56	emester	Method of grading numerical grade	Mod	dul level	graduate	
	Course	S		FOKUS Vorlesung zu aktuellen Forschungsthemen (FOKUS Lecture on Topics in Current Research): V (4 weekly contact hours) + Ü/P (2 weekly contact hours), German or English, details on availability to be announced FOKUS Kompaktseminar (FOKUS Block Taught Seminar): S (2 weekly contact hours), German or English, details on availability to be announced FOKUS Miniforschungsprojekt (FOKUS Mini Research Project): P (2 weekly contact hours), German or English, details on availability to be announced This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral examination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages) Assessment components 1 and 3 will be offered in German or English. Students must register for assessment components 1 and 3 online (details to be announced). Details on when assessment components will be offered to be announced. To pass this module, students must pass each of the assessment components 1 through 3.						
	Method	d of ass								
11-FM-TI-131-m01	FOKUS Research Module Topological Insulators									
	ECTS	10	Duration	1 1 56	emester	Method of grading numerical grade	Mod	dul level	graduate	
	Course	S		hours) + Ü Kompakts or English	/P (1 weekly o eminar Topolo , details on av	Ibleiter-Nanostrukturen (Quantum Transport contact hour), German or English, once a year ogische Isolatoren (Block Taught Seminar Top vailability to be announced (block taught sem ne subsequent semester)	r (summer sem pological Insula	nester) lators): S (2	weekly contact hours), German	
	Method	d of ass		This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or oral e amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 pages) 2. Seminar: talk (approx. 30 to 45 minutes)						
				Students of Assessments be offered	must register in nt componen to be annour	ts 1 and 2 will be offered in German or English for assessment components 1 and 2 online (o t 1 will be offered once a year in the summer s nced. udents must pass both assessment compone	details to be an semester; deta	ails on whe	n assessment component 2 will	

11-FM-TFP-141-m01	FOKUS	Resear	ch Module	Topol	ogy in Solid State	Physics				
· ·	ECTS	10	Duration		1 semester	Method of grading numerical grade	Modul level	graduate		
	Course	S		Germa Kompa tact ho	nn or English, once aktseminar Topolog	perphysik (Topology in Solid State Physics): V (a year (summer semester) gie in der Festkörperphysik (Block Taught Sem nglish, details on availability to be announced	inar Topology in Solid	State Physics): S (2 weekly con-		
	Method of assessment			1. Top ami	ics covered in lectu	owing assessment components ares and exercises: written examination (appro idate each or oral examination in groups (app 30 to 45 minutes)				
				Stude: Assess be offe	Assessment components 1 and 2 will be offered in German or English. Students must register for assessment components 1 and 2 online (details to be announced). Assessment component 1 will be offered once a year in the summer semester; details on when assessment component 2 will be offered to be announced. To pass this module, students must pass both assessment component 1 and assessment component 2.					
11-FM-TFP-MF-141-	FOKUS	Resear	ch Module	e Topology in Solid State Physics with Mini Research Project						
mo1	ECTS 14 Duration				1 semester	Method of grading numerical grade	Modul level	graduate		
	Course			Germa Kompa tact ho meste Minifo contac prox. 3	an or English, once aktseminar Topolog burs), German or Er r break) rschungsprojekt To ct hours), German o 3 weeks part time)	perphysik (Topology in Solid State Physics): V (a year (summer semester) gie in der Festkörperphysik (Block Taught Sem nglish, details on availability to be announced opologie in der Festkörperphysik (Mini Researd or English, details on availability to be announ	inar Topology in Solid (block taught semina ch Project Topology in	State Physics): S (2 weekly conr (3 days), usually held during se-Solid State Physics): P (2 weekly		
	Method of assessment			This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 p. 2. Seminar: talk (approx. 30 to 45 minutes) 3. Research project: project report (approx. 8 pages)						
				Stude Assess 3 will I	nts must register fo sment component be offered to be an	s 1 through 3 will be offered in German or Engli or assessment components 1 through 3 online 1 will be offered once a year in the summer ser nounced. dents must pass each of the assessment comp	(details to be announ mester; details on who			

11-FM-QUI-132-	FOKUS	Quantu	ım Inform	ation Technology						
mo1	ECTS	10	Duration	1 semester	Method of grading numerical grade		Modul level	graduate		
	Course	S		Quanteninformationstechnologie (Quantum Information Technology): V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (winter semester) Kompaktseminar Quanteninformationstechnologie (Block Taught Seminar Quantum Information Technology): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)						
	Method of assessment			1. Topics covered in lect	lowing assessment components tures and exercises: written examinatio didate each or oral examination in grou c. 30 to 45 minutes)					
				Students must register f Assessment component offered to be announced	ts 1 and 2 will be offered in German or E for assessment components 1 and 2 on t 1 will be offered once a year in the win d. udents must pass both assessment con	line (details to ter semester;	details on when	assessment component 2 will be		
11-FM-QUI-141-mo1	FOKUS	Resear		e Quantum Information T		•		<u> </u>		
	ECTS	10	Duration	ı semester	Method of grading numerical grade	<u> </u>	Modul level	graduate		
	Courses			hour), German or Englis Kompaktseminar Quant	chnologie (Quantum Information Techn h, once a year (winter semester) ceninformationstechnologie (Block Taug English, details on availability to be ann	ght Seminar Qu	uantum Informat	tion Technology): S (2 weekly con-		
	Method	d of asso		 Topics covered in lect amination of one can 	This module has the following assessment components 1. Topics covered in lectures and exercises: written examination (approx. 90 minutes) or talk (approx. 30 minutes) or ora amination of one candidate each or oral examination in groups (approx. 30 minutes) or project report (approx. 8 page 2. Seminar: talk (approx. 30 to 45 minutes)					
				Students must register f Assessment component offered to be announced	ts 1 and 2 will be offered in German or E for assessment components 1 and 2 on t 1 will be offered once a year in the win d. udents must pass both assessment con	line (details to ter semester;	details on when	assessment component 2 will be		

11-FM-DFT-142-	FOKUS	Resear	ch Modul	e Dens	ity Functional Theor	y and the Physics of	Oxide Heterostructure		
mo1	ECTS	8	Duration	ı	1 semester	Method of grading	numerical grade	Modul level	graduate
	Course	S		Dichtefunktionaltheorie und Physik der oxidischen Heterostrukturen (Density Functional Theory and Physics of Oxide Heterostructures): V (2 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (winter semester) Kompaktseminar Dichtefunktionaltheorie und Physik der oxidischen Heterostrukturen (Block Taught Seminar Density Functional Theory and Physics of Oxide Heterostructures): S (2 weekly contact hours), German or English, details on availability to be announced (block taught seminar (3 days), usually held during semester break)					
	Method of assessment			 Top ami Sen Asses Stude Asses offere 	ics covered in lectur mation of one candi minar: talk (approx. g sment components nts must register for sment component 1 d to be announced.	res and exercises: wr date each or oral exa 30 to 45 minutes) 1 and 2 will be offere r assessment compo will be offered once	ritten examination (approx. 90 imination in groups (approx. 30 ed in German or English. nents 1 and 2 online (details to	o minutes) or pro be announced) details on when	l. assessment component 2 will be
	other p	rerequis	sites		nmended: 11-CMS		•		- ·
Thesis (30 ECTS cre	edits)								
11-MA-PF-111-mo1	Master	Thesis	FOKUS PI	hysics					
	ECTS	30	Duration	1	1 semester	Method of grading	numerical grade	Modul level	graduate
	Course	S		no courses assigned					
	Method of assessment								