

Module title		Abbreviation
Statistical Physics - Exercises		11-T-SA-152-m01
Module coordinator		Module offered by
Managing Director of the Institute of Theoretical Physics and Astrophysics		Faculty of Physics and Astronomy
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Exercises in Statistical Physics and theoretical thermodynamics according to the content of 11 T-SEV content. Among others Principles of statistics, Statistical Physics, ideal systems, fundamental theorems, thermodynamic potentials, quantum statistics, Fermi and Bose gas, systems of interacting particles, approximation methods, Ising models, critical phenomena, etc.		
Intended learning outcomes		
The students are familiar with the mathematical methods of theoretical thermodynamics and Statistical Physics and are able to independently apply them to the description and solution of problems of Statistical Physics and to interpret the results in a physical manner.		
Courses (type, number of weekly contact hours, language — if other than German)		
Ü (2) Module taught in: Ü: German or English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
written examination (approx. 120 minutes) Language of assessment: German and/or English		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor' degree (1 major) Physics (2015) Bachelor' degree (1 major) Nanostructure Technology (2015) Bachelor' degree (1 major) Mathematical Physics (2015) Bachelor' degree (1 major) Mathematical Physics (2016) Bachelor' degree (1 major) Physics (2020) Bachelor' degree (1 major) Nanostructure Technology (2020) Bachelor' degree (1 major) Mathematical Physics (2020) Bachelor' degree (1 major) Quantum Technology (2021) exchange program Physics (2023) Bachelor' degree (1 major) Mathematical Physics (2024)		

