

Module title		Abbreviation
Advanced Topics in Astrophysics		11-CSAM-Int-201-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)
6	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	Approval from examination committee required.
Contents		
An in-depth study of particular current topics in astrophysics. Concepts of astrophysics will be conveyed which are relevant to the following topics: Stellar structure, star formation and development, radiation transport, gas dynamics, heating and cooling processes of the interstellar medium, astrochemistry, accretion and jets, galaxy formation, as well as related topics.		
Intended learning outcomes		
Acquisition of advanced skills in current topics of astrophysics. Capability to independently get acquainted with current research topics in astrophysics.		
Courses (type, number of weekly contact hours, language — if other than German)		
V (3) + R (1) Module taught in: 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)		
a) written examination (approx. 90 to 120 minutes) or b) oral examination of one candidate each (approx. 30 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) or d) project report (approx. 8 to 10 pages) or e) presentation/talk (approx. 30 minutes). If a written examination was chosen as method of assessment, this may be changed and assessment may instead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest. Language of assessment: English		
Allocation of places		
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Additional information		
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Workload		
180 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		
Master's degree (1 major) Physics International (2020) Master's degree (1 major) Physics International (2024)		