

<b>Module title</b>		<b>Abbreviation</b>
Advanced Topics in Astrophysics		11-CSAM-Int-201-m01
<b>Module coordinator</b>		<b>Module offered by</b>
Managing Director of the Institute of Theoretical Physics and Astrophysics		Faculty of Physics and Astronomy
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
6	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	Approval from examination committee required.
<b>Contents</b>		
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.		
<b>Intended learning outcomes</b>		
Acquisition of advanced skills in current topics of astrophysics. Capability to independently get acquainted with current research topics in astrophysics.		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
V (3) + R (1) Module taught in: English		
<b>Method of assessment</b> (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
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		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Physics International (2020)		