

Module description

Module title					Abbreviation
Contemporary Astrophysics					11-CAP-Int-201-m01
Module coordinator				Module offered by	
Managing Director of the Institute of Theoretical Physics and Astrophysics				Faculty of Physics and Astronomy	
ECTS	Meth	lethod of grading Only after succ. c		mpl. of module(s)	
6	nume	erical grade			
Duration		Module level	Other prerequisites		
1 semester		graduate	-		
Contents					

History of Astronomy, Coordinates and Time Measurement, the Solar System, Exoplanets, Astronomical Scales, Telescopes and Detectors, Stellar Structure and Atmospheres, Stellar Evolution and their End Stages, Interstellar Medium, Molecular Clouds, Structure of the Milky Way, the Local Universe, the Expanding Universe, Galaxies, Active Galactic Nuclei, Large-Scale Structures, Cosmology.

Intended learning outcomes

The student is familiar with the modern astrophysical world view. He/She knows the methods and instruments of astrophysical research. He/She is able to plan and interpret his/her own observations. He/She is familiar with the physics and evolution of the most important astrophysical objects, e.g., stars and galaxies.

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

Additional information

Workload

180 h

Teaching cycle

Teaching cycle: every year, after announcement

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

Module appears in

Master's degree (1 major) Physics International (2020) exchange program Physics (2023)

Master's degree (1 major) Physics International (2024)