

Module title		Abbreviation
FOKUS Research Module Theoretical Astrophysics		11-FM-AST-092-m01
Module coordinator		Module offered by
chairperson of examination committee		Faculty of Physics and Astronomy
ECTS	Method of grading	Only after succ. compl. of module(s)
10	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	Mechanics, electrodynamics, programming in C++; recommended: atomic, nuclear and particle physics, thermodynamics.
Contents		
Specific and advanced knowledge of independent scientific work in Theoretical Astrophysics; modelling of complex observation results; numeric simulations. Reproduction of knowledge, acquisition of social and methodological competencies.		
Intended learning outcomes		
The students have special and advanced knowledge of independent scientific work in Theoretical Astrophysics. They have basic knowledge of the methods of Theoretical Astrophysics. They are able to design complex observations and to test the models with the help of simulations. They are able to acquire advanced knowledge and to summarise their knowledge in an oral presentation.		
Courses (type, number of weekly contact hours, language — if other than German)		
Theoretische Astrophysik (Theoretical Astrophysics): V (3 weekly contact hours) + Ü/P (1 weekly contact hour) Kompaktseminar Theoretische Astrophysik (Block Taught Seminar Theoretical 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 (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>This module has the following assessment components</p> <ol style="list-style-type: none"> 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) <p>Assessment component 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.</p>		
Allocation of places		
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Additional information		
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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) FOKUS Physics (2010) Master's degree (1 major) FOKUS Physics (2011)		