## Module title

FOKUS Research Module High Energy Astrophysics

### Abbreviation

11-FM-HAS-111-m01

## Module coordinator

Chairperson of examination committee

## Module offered by

Faculty of Physics and Astronomy

## ECTS

10

## Method of grading

Numerical grade

## Only after succ. compl. of module(s)

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## Duration

1 semester

## Module level

Graduate

## Other prerequisites

11-A4, 11-KET

## Contents

Specific and advanced knowledge for independent scientific work in the research area of High-Energy Astrophysics.

## Intended learning outcomes

The students have special and advanced knowledge of independent scientific work in the field of High-Energy Astrophysics. They have knowledge of cosmology and/or Plasma Astrophysics (cf. modules 11-AKM, 11-APL). They are able to reproduce and summarise the acquired knowledge in a seminar presentation.

## Courses

**Type, number of weekly contact hours, language — if other than German**

- **Plasma-Astrophysik (Plasma-Astrophysics):** V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English, once a year (summer semester)
- **Kosmologie (Cosmology):** V (3 weekly contact hours) + Ü/P (1 weekly contact hour), German or English
- **Kompaktseminar Hochenergie-Astrophysik (Block Taught Seminar High Energy 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**

This module has the following assessment components

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)

Assessment components 1 and 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. Lectures and exercises will cover either plasma-astrophysics or cosmology (as announced by or agreed upon with the lecturer).

To pass this module, students must pass both assessment component 1 and assessment component 2.

## 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)
- Master’s degree (1 major) FOKUS Physics (2006)