## Module title

### Particle Radiation Detectors

### Abbreviation

11-DTS-152-m01

## Module coordinator

Managing Director of the Institute of Applied Physics

## Module offered by

Faculty of Physics and Astronomy

## ECTS

4

## Method of grading

Numerical grade

## Duration

1 semester

## Module level

Graduate

## Other prerequisites

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## Contents

Principles of interaction between particles and matter. Particle detectors for space and time measurement, determination of momentum, energy and particle identification. Conception of particle detectors in examples.

## Intended learning outcomes

The students know the physical principles and the basic structure of particle detectors. They know the functions and applications of different types of detectors, they can explain the measurement of physical values and have basic knowledge of the conception of detector systems.

## Courses

(V (2) + R (1))

Module taught in: German or English

## Method of assessment

Written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes) or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10 pages) or 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.

Assessment offered: Once a year, summer semester

Language of assessment: German and/or English

## 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

Bachelor' degree (1 major) Physics (2015)