Module title  |  Abbreviation
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Magnetism  |  11-MAG-Int-201-m01

Module coordinator  |  Module offered by
Managing Director of the Institute of Applied Physics  |  Faculty of Physics and Astronomy

ECTS | Method of grading | Only after succ. compl. of module(s)
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6 | numerical grade | --

Duration | Module level | Other prerequisites
1 semester | graduate | --

Contents
Dia- and paramagnetism, Exchange interaction, Ferromagnetism, Antiferromagnetism, Anisotropy, Domain structure, Nanomagnetism, Superparamagnetism, Experimental methods to measure magnetic properties. Kondo effect.

Intended learning outcomes
Knowledge of the basic terminology, concepts and phenomena of magnetism and the experimental methods to measure them. Skills in constructing simple models and describing the mathematical formalism, and the ability to apply these skills to the mentioned fields of magnetism. Competence to independently solve problems in these fields. Capability of assessing the precision of observations and of their analysis.

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.
Assessment offered: In the semester in which the course is offered and in the subsequent semester
Language of assessment: 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
keinem Studiengang zugeordnet