### Module title
Modern Physics 2 (Molecule and Solid State Physics)

### Abbreviation
11-L-M2-152-m01

### Module coordinator
Managing Director of the Institute of Applied Physics

### Module offered by
Faculty of Physics and Astronomy

### ECTS
5

### Method of grading
Numerical grade

### Only after succ. compl. of module(s)
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### Duration
2 semester

### Module level
Undergraduate

### Other prerequisites
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### Contents
Mechanical, dielectric and magnetic properties of molecules, rotational, vibrational and electronic excitation of molecules, measuring methods, structure of solids, scattering methods, lattice vibrations, thermal properties of insulators.

### Intended learning outcomes
Understanding of the structure of molecules and chemical bonding, knowledge of experimental methods for the examination of molecules, understanding of the structure of crystalline solids, their modelling as translation-invariant lattices and the consequences.

### Courses
**V (3) + Ü (1)**

Module taught in: Ü: German or English

### Method of assessment
Written examination (approx. 90 to 120 minutes)

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)

§ 77 I Nr. 1 b)

### Module appears in
First state examination for the teaching degree Gymnasium Physics (2015)
First state examination for the teaching degree Gymnasium Physics (2018)