PHYS-610

Nonlinear Spectroscopy (2023)

Roke Sylvie

Cursus	Sem.	Type
Photonics		Opt.

Language of teaching	English
Credits	3
Session	
Exam	Written
Workload	90h
Hours	**42**
Lecture	28
Exercises	14
Number of positions	

Frequency

Every 2 years

Remark

2022 to be confirmed

Summary

Molecular properties relevant for spectroscopy...

Content

- Molecular properties relevant for spectroscopy
- Symmetry properties, space, time induced
- Susceptibility: Relation between molecular properties and macroscopic
- Optical properties
- Overview of nonlinear optical spectroscopies: SHG / SFG / CARS
- Nonlinear optical spectroscopy on planar surfaces
- Nonlinear optical spectroscopy on particle surfaces

Learning Prerequisites

Recommended courses

bachelor level physics / chemistry