

PHYS-616

Solid State Physics X: experimental techniques

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Cursus	Sem.	Type
Physics		Obl.

Language of teaching	English
Credits	3
Session	
Exam	Oral
Workload	90h
Hours	42
Courses	28
Exercises	14
Number of positions	

Frequency

Every year

Remark

Every year / Next time: Spring 2019

Summary

This course allows students to learn the details of selected experimental techniques in solid state physics with some theoretical background. After the course students should be able to use presented techniques in their own research and advance their knowledge by studying the subject further.

Content

Presented experimental techniques:

- 1) Charge transport
- 2) Magnetization
- 3) Magnetic susceptibility
- 4) Specific heat
- 5) Thermal conductivity
- 6) Electron spin resonance
- 7) Nuclear magnetic resonance
- 8) Angle-resolved photo-emission spectroscopy
- 9) Resonant x-ray scattering
- 10) Neutron scattering