Bonn-Cologne Graduate School of Physics and Astronomy

Intensive Week: Spectroscopic characterization of the electronic and vibrational structure of surfaces and solids

12. - 16. October 2015,
Seminar room - II. Phys. Institute, University of Cologne

Lecturers: Prof. Karl Michel (University of Antwerp)
Dr. Alexei Nefedov (Karlsruhe Institute of Technology)
Dr. Luca Petaccia (ELETTRA Sincrotrone, Trieste)
Prof. Jörg Fink (IFW-Dresden)
Prof. Alexander Grüneis (University of Cologne)

Contents of the course:
- Electrons & phonons in solids
- Near edge x-ray absorption spectroscopy
- Photoemission spectroscopy using synchrotron radiation (XPS and ARPES)
- Description of interacting electrons (ARPES data analysis)
- Optical Spectroscopies: Raman, Optical absorption, Photoluminescence

Schedule: Lectures 900 - 1230 (incl. coffee break)
Solving exercises for next day: 1330 - 1530
Exercise classes: 1530 - 1730 from Tue-Fri & 930 - 1100 on Sat

Audience: The course is intended for MSc students who want to do a PhD in Spectroscopy/Cond. Matt. Physics. The number of participants is limited to 12. Application deadline is Sept 1, 2015. Please register with: grueneis@ph2.uni-koeln.de
As a specialized course within the area of specialization of Condensed Matter Physics, 4 CP will be awarded to successful participants.