

Bonn-Cologne Graduate School of Physics and Astronomy

Intensive Week Course Advanced Spectroscopy of Solids

23. – 27. February 2015, 9⁰⁰-12⁰⁰ / 14⁰⁰ - 16⁰⁰

Seminar room - II. Phys. Institute, University of Cologne



Main Lecturer:

Prof. Dr. Fulvio Parmigiani (Dipartimento di Fisica, Università degli Studi di Trieste/ Elettra-Sincrotrone Trieste)

Abstract:

The scope of these lectures is help the students of our graduate program to build a bridge between the theory (quantum) of condensed matter and the most advanced spectroscopies nowadays available. The matter is extremely vast and complex and probably the barriers to understand these concepts are high. Hence, it is wise to not try to hop them in a single leap.

The lectures are thought for graduate students in experimental condensed matter, having in mind the necessity of providing these students with a clear and possibly simple theoretical back-ground. It is my conviction that this approach is always source and aliment for novelties and creativity.

The lectures first are focused on the elementary excitations in solids and the related photoelectron spectroscopies. Then the lectures will continue on the magnetic interactions and spin, as they can be observed and detected by X-ray Magnetic Circular Dichroism (XMCD), X-ray Magnetic Linear Dichroism (XMLD), Spin Polarized PES and Spin Polarized Circular Dichroic Resonant PES.

The lectures will be accompanied by exercises in the afternoon (14⁰⁰-16⁰⁰). It is foreseen that successful attendance of the exercises will be rewarded within the credit-point scheme.

No fees are required. The number of attendants will be limited to about 40. Due to organizational reasons, we require you to register. Please indicate that you need the credit points upon registration.

Please, send your informal registration requests until 21.02.2015 to schulz@ph2.uni-koeln.de.

If you have any further question, please contact Prof. Paul H. M. van Loosdrecht via pvl@ph2.uni-koeln.de.

The program and additional information will be timely available at: www.ph2.uni-koeln.de

