





17. — 21. February 2014, University of Cologne Seminar room - 2. Physikalisches Institut

## **Main Lecturer:**

Prof. Dr. Fulvio Parmingiani (Elettra-Sincrotrone Trieste)

## **Abstract:**

The series of lectures given by Prof. Dr. Parmigiani will introduce X-ray spectroscopy as a powerful tool for studying the structure of matter. Scope of the lectures is to describe the physical mechanisms at the base of the photoelectric absorption, light scattering, and light emission processes in solids, with a special focus on the X-ray spectral domain. Along with the basic principles, some of the main experimental techniques will be presented and discussed for the case of strongly correlated electron systems, high temperature superconductors, and magnetic materials.

The lectures will be accompanied by exercises in the afternoon.

It is foreseen that successful attendence 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, send your informal registration requests until **12.02.2014** to <u>gradschool.physics@uni-koeln.de</u>. If you have any further question, please contact Prof. Paul H. M. van Loosdrecht via <u>pvl@ph2.uni-koeln.de</u>.

The program and additional information will be timely available at: <a href="www.ph2.uni-koeln.de">www.ph2.uni-koeln.de</a>









