New X-ray Sources for Life Science Applications. XI. Research Course on X-Ray Sciences 21-23 March 2012, DESY Hamburg

- New X-ray Sources for Biological Materials
- Structure of Biomolecules
- Radiation Damage
- X-ray Tomography and Coherent Imaging
- > Proteins in Solution
- Structural Biology and Infection

X-ray scattering and spectroscopy have become key methods to study biological materials. In particular, macromolecular crystallography and small angle X-ray scattering are techniques to reveal the structure of biological macromolecules such as proteins and ribosoms. The advent of free-electron lasers for short-wavelength radiation and the latest generation of storage rings for the generation of hard X-ray synchrotron radiation allows for new experimental techniques, therefore enabling new scientific results on biological materials. The DESY Research Course shall provide basic knowledge about new directions of X-ray research and address Diploma, Master, PhD students and young research fellows. The 11th course is especially dedicated to new applications in the field of X-ray science in biology. Experimental techniques and scientific applications will be discussed.

The number of participants is limited. Applications for this course should be made no later than 11 March 2012.

Speakers:

I. Bento (UNL), D. Bourgeois (IBS), H. Chapman (CFEL), C. Jacobsen (APS/Northwestern U), J. Lal (ANL), C. Larabell (LBL/UCSF), A. Meents (DESY), M. Perbandt (U Hamburg/CSSB), I. Schlichting (MPI Heidelberg), D. Svergun (EMBL Hamburg), M. Wilmanns (EMBL Hamburg)

ORGANIZING COMMITTEE: G. Grübel (DESY), F. Lehmkühler (DESY), M. Kreuzeder (DESY) research-course-org@desy.de

http://researchcourse2012.desy.de

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