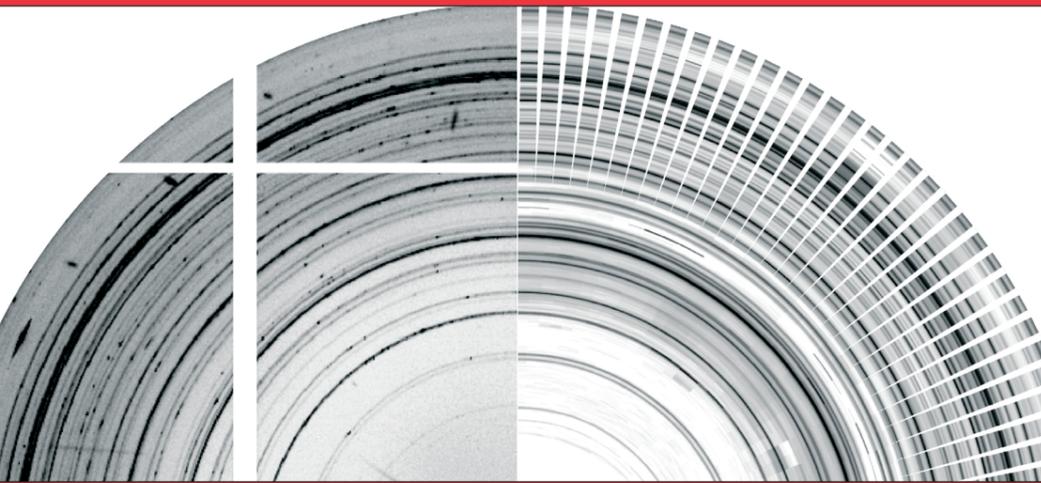


Powder Diffraction School 2016

Modern Synchrotron Methods

22 – 26 August 2016 • Paul Scherrer Institute • 5232 Villigen PSI • Switzerland



pds2016@psi.ch

Registration: www.psi.ch/pds2016

Lecturers

Federica Bertolotti	Università dell'Insubria, Italy
Michela Brunelli	ESRF, Grenoble, France
Michael Evans	Bruker AXS GmbH, Karlsruhe, Germany
Nicola Casati	Paul Scherrer Institute, Switzerland
Radovan Cerny	University of Geneva, Switzerland
Antonio Cervellino	Paul Scherrer Institute, Switzerland
Tom Fennell	Paul Scherrer Institute, Switzerland
Ruggero Frison	University of Zurich, Switzerland
Simona Galli	Università dell'Insubria, Italy
Fabia Gozzo	Excelsus Structural Solutions S.P.R.L., Belgium
Antonella Guagliardi	ICNR-IC & To.Sca.Lab., Como, Italy
Matteo Leoni	University of Trento, Italy
Lynne McCusker	ETH Zurich, Switzerland
Steven Van Petegem	Paul Scherrer Institute, Switzerland
Philip Willmott	Paul Scherrer Institute & University of Zurich, Switzerland

Scope

Powder-diffraction methods have demonstrated an ever increasing range of applications in materials science, chemistry, physics, life sciences and engineering. Modern synchrotron-radiation methods not only provide data of exceptional quality, but have allowed previously inaccessible experiments to be performed. Along with determining the atomic structure and the relative abundance of crystalline phases in bulk samples, information on disordered materials, microstructural features, defects and their evolution in response to external stimuli over a wide range of timescales is now possible. The school, with an updated in-depth programme, aims at giving a broad overview of all the modern possibilities using synchrotron radiation, starting with a general theoretical introduction to the various methods and applications. Hands-on practicals with selected synchrotron XRPD experiments and exhaustive analysis of the collected data are the central part of the school and will provide the student with a solid fundamental understanding of these essential and versatile experimental techniques.

Organisation

Nicola Casati
Antonio Cervellino
Martina Füglister (secretary)

Topics

Atomic structure determination
Microstructure analysis
Time-Resolved
Special and advanced topics