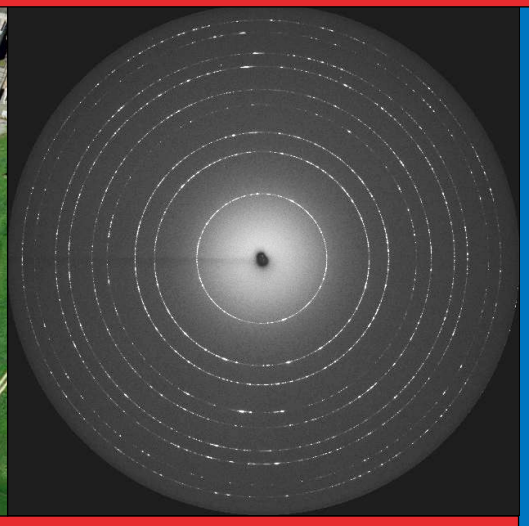
PAUL SCHERRER INSTITUT

PSI

PDS
Powder Diffraction School

Powder Diffraction School
Modern Synchrotron Methods

1 – 4 July 2014 • Paul Scherrer Institut • 5232 Villigen PSI • Switzerland



pds2014@psi .ch

Registration: www.psi.ch/pds2014

Speakers

Nicola Casati	SLS, PSI, Switzerland
Radovan Černý	University of Geneva, Switzerland
Antonio Cervellino	SLS, PSI, Switzerland
Denis Cheptiakov	Neutrons and Muons, PSI, Switzerland
Ruggero Frison	CNR-IC, Como, Italy
Simona Galli	Università degli Studi dell'Insubria, Italy
Fabia Gozzo	Excelsus Structural Solutions S.P.R.L., Belgium
Arnt Kern	Bruker AXS GmbH, Germany
Matteo Leoni	University of Trento, Italy
Lynne McCusker	ETH Zurich, Switzerland
Bruce Patterson	SwissFEL, PSI & University of Zurich, Switzerland
Steven Van Petegem	Neutrons and Muons, PSI, Switzerland

Scope

The school aims to provide a general overview of modern synchrotron powder diffraction methods and their ever-increasing range of applications in materials science, chemistry, physics, life sciences and engineering.

Powder diffraction data provides a wealth of information, from determining the atomic structure of ordered and disordered materials, to investigating their detailed microstructure and their structural and microstructural response to external stimuli such as temperature, pressure, and external fields. Modern synchrotron techniques allow previously inaccessible in-situ experiments to be performed over a wide range of time scales.

An in-depth programme, starting with a general theoretical introduction to the various methods and applications, followed by hands-on practice with selected synchrotron XRPD experiments and by exhaustive analysis of the data so collected, will provide the student with a solid fundamental knowledge of this highly important and flexible experimental technique.

Organisation

Antonio Cervellino
Nicola Casati
Martina Füglister (secretary)

Topics

Atomic Structure Determination
Microstructure Analysis
Time-Resolved
Special and Advanced Topics

Swiss Society for Crystallography

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