Crystallography School 2018
Organized by the Interdepartmental Centre for Crystallography (CrisDI)
Torino 28 May - 15 June 2018

BASIC COURSES 28 May - 1 June 2018

Prof. P. Benna
BC1: Introduction to Crystallography (1½ CFU)

Dr. A. Agostino
BC2: Instrumentation for X-Ray Diffraction (1 CFU)

Dr. R. Cossio
BC3: Electron Diffraction (1 CFU)
Electron sources: conventional and FEG. Magnetic lenses, aberrations and resolution of the electron beam: TEM, STEM, SEM. Types of electron diffraction: SAED, CBED, EBSD. Geometry, detectors and new instrumental developments.

Prof. A. Pavese
BC4: X-Ray Diffraction (1 CFU)

Prof. M. Milanesio
BC5: X-Ray Diffraction Methods: Polycrystalline (2½ CFU)

Dr. D. Marabelli
BC6: X-Ray Diffraction Methods: Single Crystal (2½ CFU)

15 June 2018

Dr. A. Agostino
SC7: The Rietveld Method (2 CFU)

Prof. R. Arletti
SC8: Inorganic Crystallochemistry (1 CFU)

Prof. E. Belluso & Dr. S. Capella
SC9: Use of TEM-EDS for the characterization of Natural or Synthetic sub-micrometric Inorganic Phases (2 CFU)

Prof. R. Giustetto
SC10: Causes of Colour in Minerals (2 CFU)

Prof. R. Arletti
SC11: In situ/operando X-Ray Powder Diffraction (1 CFU)
High pressure X-Ray powder diffraction (cell, geometries, conventional and non conventional sources). High temperature X-Ray powder diffraction. In situ/in operando X-Ray powder diffraction on porous materials: experiments and data analysis.

Prof. M. Dapaggi
SC12: Pair Distribution Function Analysis of Complex, Disorder and Amorphous Materials from Total Scattering Data (1 CFU)
Total scattering data: why? How to evaluate the structure-properties relationship of complex and disorder material. Basic theoretical needs and experimental setup. Amorphous ‘on the go’... very short range order. How to obtain a PDF and how to refine it to a model (practical).

Dr. L. Pastero
SC13: Crystal growth for beginners (1 CFU)
Ideal crystal vs real crystal. How to nucleate, grow and modify crystals in lab. Surfaces and interfaces. Surface analysis by SPM technique.

The final program and forms for registration are published in www.CrisDI.unito.it. For any further information please refer to piera.benna@unito.it.