



2 CFU (8 hours)

Crystallography School - 2019

Organized by the CrisDi – Interdepartmental Centre for Crystallography, University of Torino

Send to piera.benna@unito.it before 14 may 2019 Name and Surname: e-mail: Education: PhD (specialization, cycle): Supervisor: COURSES: **BC1** INTRODUCTION TO CRYSTALLOGRAPHY 1½ CFU (6 hours) **BC2** INSTRUMENTATION FOR X-RAY DIFFRACTION 1 CFU (4 hours) **BC3** ELECTRON DIFFRACTION 1 CFU (4 hours) **BC4** X-RAY DIFFRACTION 1 CFU (4 hours) **BC5** X RAYS DIFFRACTION METHODS: POLYCRYSTALLINE 2½ CFU (10 hours) **BC6** X-RAY DIFFRACTION METHODS: SINGLE CRYSTAL 2½ CFU (10 hours) SC1 STRUCTURAL STUDY OF BIOLOGICAL MACROMOLECULES 2 CFU (8 hours) SC2 IN SITU NON-AMBIENT CONDITIONS BY SINGLE CRYSTAL XR DIFFRACTION 2 CFU (8 hours) **SC3** SOLID STATE PROPERTIES: MODELIZATION 2 CFU (8 hours) **SC4** CAUSES OF COLOUR IN MINERALS 2 CFU (8 hours) SC5 LABORATORY OF HIGH PRESSURE EXPERIMENTS - DIAMOND ANVIL CELL (DAC) PREPARATION. 1 CFU (4 hours) SC6 THE DEBYE SCATTERING EQUATION: A TOTAL SCATTERING APPROACH FOR CHARACTERIZING NANOMATERIALS 1 CFU (4 hours) SC7 THE RIETVELD METHOD 2 CFU (8 hours) **SC8** INTRODUCTION TO CRYSTAL GROWTH 1½ CFU (6 hours) **SC9** CRYSTAL GROWTH FOR BEGINNERS 1 CFU (4 hours) SC10 USE OF TEM-EDS FOR THE CHARACTERIZATION OF NATURAL OR SYNTHETIC SUB-MICROMETRIC INORGANIC PHASES 2 CFU (8 hours) SC11 IN SITU/OPERANDO X-RAY POWDER DIFFRACTION 1 CFU (4 hours) SC12 PAIR DISTRIBUTION FUNCTION ANALYSIS OF COMPLEX, DISORDER AND AMORPHOUS MATERIALS FROM TOTAL SCATTERING DATA 2 CFU (8 hours) SC13 INORGANIC CRYSTALLOCHEMISTRY 1 CFU (4 hours)

SC14 X-RAY DIFFRACTION APPLICATIONS ON MATERIALS STUDY