

Dr. Manuel Valvidares,

Manager of the ALBA beamline for Resonant Absorption and Scattering, and head of the Electronic and Magnetic Structure of Matter section.

"ALBA Synchrotron radiation techniques for oxides, 2D-vdW and other spintronic materials"

Abstract:

The talk will present first a quick overview of ALBA and the Electronic and Magnetic structure of matter section, which encompasses the following beamlines and instruments: the X-ray Photoemission Electron Microscope (X-PEEM) at CIRCE beamline, the soft X-Ray angle-resolve photoelectron electron spectroscopy (ARPES) instrument at LOREA beamline, the X-ray Absorption Spectroscopy and Magnetic Circular Dichroism (XMCD) cryomagnet and the multipurpose reflectometer for soft x-ray resonant and coherent scattering (RSXS, XRMS, GISAXS, Holography/CDI) at BOREAS beamline. On a second part, recent highlights on the investigation of spintronic and quantum materials will be shown, and recent and on-going instrumental developments will be quickly presented. A last part of the talk will focus on more personal work and research interests focused at 2D materials and on-going instrumentation developments for this type of experiments and coherent imaging.