

ESRF-UM 2024

Tutorial at LISA

Title

Introduction to the XAS technique and to the LISA beamline

Short title

XAS and LISA

Organizers

Francesco d'Acapito, Alessandro Puri (CNR-IOM), Jacopo Orsilli (Univ Milano Bicocca)

Scope

This tutorial will provide the participants with the basis of the XAS technique and with a hands-on presentation of the LISA beamline.

Max Number of participants

4

Program Envisaged

This tutorial aims to give to participants the bases for carrying out in autonomy a complete XAS experiment at the LISA beamline. As a first step, we will briefly recall the bases of XAS theory and data analysis. Then, we will introduce the principles and practical aspects of sample preparation and spectra will be collected at the beamline on the samples prepared by the participants. Finally, a complete quantitative analysis will be carried out on the collected spectra.

Specific Instructions

It is recommended that participants come with their laptops with the XAS data analysis codes installed. It could be either:

DEMETER (<https://bruceravel.github.io/demeter/>)

or

LARCH (<https://xraypy.github.io/xraylarch/>)

Beamline Required

BM08-LISA