

Elettra 2.0: New Structural Biology Opportunities



Elettra 2.0: New Structural Biology Opportunities



Contribution ID: 1

Type: **not specified**

Elettra 2.0 project and IVU beamlines

Monday, July 3, 2023 9:20 AM (20 minutes)

After 27 years of successfully serving the user community, Elettra is undertaking a major upgrade towards a diffraction limited light source, called Elettra 2.0, enabling new science and the development of new technologies to the general benefit.

Due to a substantial reduction of the emittance of the stored electron beam, the new machine will be able to host in particular also in-vacuum undulators (IVU), allowing for new microfocus beamlines in the range of hard X-rays. Among these, in particular a new beamline dedicated to macromolecular crystallography (μ XRD) has been designed to support the requests of structural biology community, offering high photon fluxes on a micron-sized spot, opening to a fast characterization of smaller samples and to data collection strategies of increasing complexity.

The talk will highlight some characteristics of the new machine and report design and expected features of the new beamline.

Presenter: POLENTARUTTI, Maurizio (Elettra Sincrotrone Trieste)

Session Classification: Session 1 Macromolecular Crystallography Chair: Michele Cianci (Università Politecnica delle Marche)