Contribution ID: **73** Type: **not specified**

Elettra SYRMEP (SYnchrotron Radiation for MEdical Physics) beamline

Thursday, 17 November 2022 15:30 (30 minutes)

The SYRMEP (SYnchrotron Radiation for MEdical Physics) beamline has been designed by Elettra - Sincrotrone Trieste, in collaboration with the University of Trieste and the INFN, for research in medical diagnostic radiology, material science and life science applications. The use of monochromatic and laminar-shaped beams allows, in principle, an improvement of the clinical quality of images and a reduction of adsorbed dose (because of both monochromaticity and scatter reduction). Moreover, the spatial coherence of the SYRMEP source is used to overcome the poor absorption contrast of many biological samples, by the use of phase-contrast techniques.

A large number of different microimaging and microtomography experiments can be performed in different fields of material science (including geology, volcanology, cultural heritage, palaeontology and agrifood technology) and life science.

Primary author: Dr ZANINI, Franco (Elettra)

Co-authors: Dr DREOSSI, Diego; Dr LONGO, Elena (Elettra); Dr TROMBA, Giuliana (Elettra); Dr SODINI, Nicola (Elettra)

Presenter: Dr ZANINI, Franco (Elettra)

Session Classification: AfLS Contribution

Track Classification: Partner