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Advanced X-ray Studies @ XlabF

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X-ray applications are widely used in the world. By the way, due to the high interaction between radiation and matter, experimental setup, in particular optical devices, suitable for X-ray radiation is not trivial [1-3]. Consequently, performing high efficiency experiment is almost possible only in dedicated Laboratories, as Synchrotron Radiation labs.
However, in the last 30 years, the studies concerning novel advanced material have fostered the development of several solutions for more efficient X-ray systems [4], necessary to perform high spectroscopy analysis as well as wimaging techniques applied in Medicine/Pharmacology, Cultural Heritage, Geology and Environment, Electronics, Aerospace, etc⋯
The main accent will be highlighted to advance tools for X-ray both Imaging and Spectroscopy based on combination of modern polycapillary optics and developed reconstruction software together with commercially available systems [5-7].
Recent results (principally in high resolution X ray Imaging [8], μXRF [9-10] and μCT [11]) obtained at XLab-Frascati will be discussed.

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Primary authors: HAMPAI, Dariush (LNF); GUGLIELMOTTI, Valeria (LNF); CAPITOLO, Emilio (LNF); CAPPUCCIO, Giorgio (INFN); DABAGOV, Sultan (LNF)

Presenter: HAMPAI, Dariush (LNF)

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