



Istituto Nazionale di Fisica Nucleare
Laboratori Nazionali di Frascati



High Precision X-ray Measurements 2018

Laboratori Nazionali di Frascati

17-19 /10/2018

Programme

Wednesday 17 October 2018

Registration - 09:30-10:30

Welcome - 10:30-11:00

- PIERLUIGI CAMPANA LNF Director; PAOLA GIANOTTI LNF Research Division Head;
ALESSANDRO SCORDO Conference Chair

Coffee Break - 11:00-11:30

X-ray beam facilities - 11:30-13:30

- **Conveners:** CIAVARDINI Alessandra; PISCICCHIA Kristian

11:30	DAFNE-Light DXR1 Soft X-ray Synchrotron Radiation Beamline: Characteristics and Applications.	BALERNA, Antonella
12:00	BM08-LISA: the new Italian CRG XAS spectroscopy beamline at ESRF	PURI, Alessandro
12:30	A Coherent Imaging XUV-FEL users end-station for the EuPRAXIA@SPARC_LAB FEL	STELLATO, Francesco
13:00	Characterization of the Detector System for the XAFS beam-line of the synchrotron light source SESAME	CIRRINCIONE, Daniela

Lunch - 13:30-14:30

X-ray HAPG optics - 14:30-16:00

- **Conveners:** DABAGOV Sultan; ZMESKAL Johann

14:30	Graphite optics - current opportunities, prospects and limits	GRIGOREVA, Inna
15:00	Characterization and modelling of HAPG's diffraction properties	SCHLESIGER, Christopher
15:30	Characterization of HAPG mosaic crystals using synchrotron radiation	BECKHOFF, Burkhard

Coffee Break - 16:00-16:30

Graphite Crystals Spectrometers - 16:30-18:00

- **Conveners:** DABAGOV Sultan; ZMESKAL Johann

16:30	Development of a graphite Von Hamos spectrometer for hard - Xray XAS applications	CIBIN, Giannantonio
17:00	High resolution X-ray spectroscopy with HAPG crystals	SCHLESIGER, Christopher
17:30	A compact and calibratable von Hamos X-Ray Spectrometer based on two full-cylinder HAPG mosaic crystals for high-resolution XES	HOLFELDER, Ina

Thursday 18 October 2018

X-ray detectors (1) - 09:00-11:00

- **Conveners:** CURCEANU Catalina; MARTON Johann;

09:00	Silicon Detectors for Real-Time Dosimetry in Radiation Therapy	LERCH, Michael
09:30	Scintillator pixel detectors for measurements of gamma ray Compton scattering	MAKEK, Mihael
10:00	Large Format, Direct And Indirect Detection CCD Cameras For Soft X-Ray	VITUCCI, Francesco Maria
10:30	Development of Advanced Room Temperature Silicon Drift Detectors and Electronics for Synchrotron Radiation, X-ray Astronomy and Astrophysics	VACCHI, Andrea

Coffee Break - 11:00-11:30

X-ray detectors (2) - 11:30-13:30

- **Conveners:** CURCEANU Catalina; MARTON Johann;

11:30	Silicon Drift Detectors and low-noise readout ASICs for X-ray Spectroscopy	AMIRKHANI, Aidin
12:00	ARDESIA - a Fast SDD X-ray Spectrometer for Synchrotron Applications	HAFIZH, Idham
12:30	Silicon Drift Detectors for exotic atom precision measurements, SIDDHARTA-2 experiment	MILIUCCI, Marco
13:00	Detectors for present and future light sources at Elettra	MENK, Ralf Hendrik

Lunch - 13:30-14:30

Materials investigation techniques (1) - 14:30-16:00

- **Conveners:** CIBIN Giannantonio; BALERNA Antonella

14:30	Nanoscale geometry and dynamics in complex matter as seen by synchrotron x-ray micron beam techniques	CAMPI, Gaetano
15:00	A novel approach to a non-destructive depth profiling using soft x-ray spectroscopies	REZVANI, S. Javad
15:30	X-ray characterization of thin conducting MoO ₃ films on copper. A new opportunity for technological applications	MACIS, Salvatore

Coffee Break - 16:00-16:30

Materials investigation techniques (2) - 16:30-18:30

- **Conveners:** CIBIN Giannantonio; BALERNA Antonella

16:30	Polycapillary Optics for precise measurements	DABAGOV, Sultan
17:00	Radiation-induced photoluminescent point defects in lithium fluoride for versatile X-ray imaging detectors	BONFIGLI, Francesca
17:30	PolyCO Techniques Applied on X-ray Analysis	HAMPAI, Dariush
18:00	XAS measurements of high-diluted Cu-Amylin complexes	DE SANTIS, Emiliano

Social Dinner at "Il Caminetto" restaurant - 20:00-22:30

Friday 19 October 2018

X-rays in nuclear physics - 09:30-11:00

- **Conveners:** LERCH Michael; HAMPAL Dariush

09:30	Is there place for strangeness in the Universe? Kaonic atoms studies at the DAFNE collider with advanced X-ray detectors	CURCEANU, Catalina Oana
10:00	Past experiments and possible future experiments with high resolution X-ray detectors	MARTON, Johann
10:30	X-ray measurements at J-PARC – a general overview	ZMESKAL, Johann

Coffee Break - 11:00-11:30

X-ray applications in various fields (1) - 11:30-13:30

- **Conveners:** LERCH Michael; HAMPAL Dariush

11:30	Characterization of sub-ps hard X-ray pulses for pump-probe experiments	CIAVARDINI, Alessandra
12:00	SPHINX: Structure Probing by Holographic Imaging at Nanometer scale with X-ray lasers	ILIESCU, Mihail Antoniu
12:30	Imaging of X-rays from ortho-positronium decay with J-PET tomograph	NIEDZWIECKI, Szymon
13:00	Metal elemental organizations in natural Sphalerite : an X-ray absorption microscopy study	MARINI, Carlo

Lunch - 13:30-14:30

X-ray applications in various fields (2) - 14:30-16:00

- **Conveners:** SCORDO Alessandro.

14:30	High precision tests of the Pauli Exclusion Principle, status and future perspectives	PISCICCHIA, Kristian
15:00	X-ray detector technologies for astrophysics on-board the enhanced X-ray Timing and Polarimetry (eXTP) mission	EVANGELISTA, Yuri
15:30	The HERMES project	CAMPANA, Riccardo

Conclusions - 16:00-16:15

- **ALESSANDRO SCORDO** Conference Chair