

High precision X-ray measurements 2021

Tuesday, 8 June 2021

Session: Morning #1 (09:00 - 10:20)

-Conveners: Alessandro Scordo

time	[id] title	presenter
09:00	[52] Introduction from the LNF Director and Organizer	BOSSI, Fabio SCORDO, Alessandro
09:20	[5] Opening Lecture: Wilhelm Conrad Röntgen –Discovery and first attempts to clarify the physical nature of X-rays	BUSCH, Uwe

Session: Morning #2 (10:40 - 11:40)

-Conveners: Gaetano Campi

time	[id] title	presenter
10:40	[40] XAS (X-Ray Absorption Spectroscopy) spectroscopy: state of the art and some applications in material science	BENFATTO, Maurizio
11:00	[35] Precision X-ray spectroscopy of muonic atoms to explore QED under strong electric fields	OKADA, Shinji
11:20	[1] The EuPRAXIA@SPARC_LAB project and related R&D activities at LNF.	FERRARIO, Massimo

Session: Morning #3 (12:00 - 13:00)

-Conveners: Anna Bergamaschi

time	[id] title	presenter
12:00	[45] DANAÉ – A direct search for light Dark Matter with DEPFET-RNDR detectors	TREBERSPURG, Wolfgang
12:20	[21] Dynamical and correlated disorder at nanoscale in complex materials	CAMPI, Gaetano
12:40	[43] Unique properties of Pyrolytic Graphite for extreme conditions	GRIGORIEVA, Inna

Session: Afternoon #1 (14:00 - 15:00)

-Conveners: Massimo Ferrario

time	[id] title	presenter
14:00	[10] Silicon Drift Detectors and fast readout electronics for high-rate, high-resolution X-ray measurements	FIORINI, Carlo Ettore
14:20	[4] Analysis and design of X-ray optical systems applying hierarchical models including partial coherence	SANCHEZ DEL RIO, Manuel
14:40	[50] Advanced spectroscopy and microscopy studies for chemical elements evaluation by micro-X-ray Fluorescence and polycapillary optics	GUGLIELMOTTI, Valeria

Session: Afternoon #2 (15:15 - 16:15)

-Conveners: Manuel Sanchez del Rio

time	[id] title	presenter
15:15	[49] Advanced X-ray Studies @ XlabF	HAMPAL, Dariush
15:35	[38] New multichannel modular detection system based on Silicon Drift Detectors	CIRRINCIONE, Daniela
15:55	[28] Laser-Induced XUV Spectroscopy (LIXS) for High-Precision Lithium Analysis of Energy Materials	QU, Di

Session: Afternoon #3 (16:30 - 17:30)**-Conveners: Peter Predehl**

time	[id] title	presenter
16:30	[27] CdZnTe based detectors for X and gamma ray spectroscopic imaging.	ZAPPETTINI, Andrea
16:50	[51] Testing foundations of Quantum Mechanics in the cosmic silence	PISCICCHIA, Kristian
17:10	[12] Precision X-ray spectroscopy of hadronic atoms - pionic hydrogen challenges and results	MARTON, Johann

Wednesday, 9 June 2021

Session: Morning #1 (09:00 - 10:20)

-Conveners: Francesco D'Acapito

time	[id] title	presenter
09:00	[30] Digital spectroscopic improvements in CdZnTe detectors for 2-D and 3-D spectroscopic X-ray and gamma ray imaging.	ABBENE, Leonardo
09:20	[47] Channeling X-rays for Coherence Measurements	DABAGOV, Sultan
09:40	[18] Mastering Synchrotron Microbeams for Radiotherapy: effective cancer treatment with remarkable healthy tissue tolerance	ENGELS, Elette
10:00	[3] Electronic and structural investigation on gold monometallic and bimetallic nanoparticles using x-ray absorption fine structure spectroscopy.	BALERNA, Antonella

Session: Morning #2 (10:40 - 11:40)

-Conveners: Alessandra Gianoncelli

time	[id] title	presenter
10:40	[36] X-ray Absorption Spectroscopy studies on GeTe based Phase-Change Materials	D'ACAPITO, Francesco
11:00	[22] SiPMs for real-time X-ray beam monitoring in transmission mode	SERVOLI, Leonello
11:20	[33] The Advanced Surveyor of Transient Events and Nuclear Astrophysics (ASTENA)	MOITA, Miguel

Session: Morning #3 (12:00 - 13:00)

-Conveners: Sultan Dabagov

time	[id] title	presenter
12:00	[54] High precision kaonic atoms X-ray measurements at the DAFNE collider: the SIDDHARTA-2 experiment	MILIUCCI, Marco
12:20	[42] Real-time detection of quantal dopamine release from single cells stimulated by X-ray irradiation	PICOLLO, Federico
12:40	[32] Probing Electron Properties in ECR Plasmas using X-ray Bremsstrahlung and Fluorescence Emission	MISHRA, Bharat

Session: Afternoon #1 (14:00 - 15:00)

-Conveners: Maurizio Benfatto

time	[id] title	presenter
14:00	[23] Construction and test of the Gas Pixel Detectors for the IXPE Mission	MANFREDA, Alberto
14:20	[6] Applications of HAPG for high resolution spectroscopy	MALZER, Wolfgang
14:40	[41] Local structure and electronic properties of some emerging BiS ₂ -based materials	SAINI, Naurang

Session: Afternoon #2 (15:15 - 16:15)

-Conveners: Luca Rebuffi

time	[id] title	presenter
15:15	[17] X-ray Grating Interferometry design for the 4D GRAPH-X system	PATERA, Alessandra
15:35	[16] ARIA – A VUV beamline for EuPRAXIA@SPARC_LAB	VILLA, Fabio
15:55	[7] Advances in hybrid detector development for synchrotrons and XFELs at PSI	BERGAMASCHI, Anna

Session: Afternoon #3 (16:30 - 17:30)**-Conveners: Naurang Saini**

time	[id] title	presenter
16:30	[9] Optical simulation tools in the OASYS suite and their applications to x-ray optics design	REBUFFI, Luca
16:50	[44] Energy-Dispersive RIXS	SANCHEZ, Héctor Jorge

Thursday, 10 June 2021

Session: Morning #1 (09:00 - 10:20)

-Conveners: Shinji Okada

time	[id] title	presenter
09:20	[29] Compressive signal collection for dynamic XAFS in the home lab	HEMANI, Yousuf
09:40	[13] High-precision X-ray total scattering measurements using a high-accuracy detector system	KATO, Kenichi
10:00	[15] Study of multi-pixel scintillator detector configurations for measuring polarized gamma radiation	KOŽULJEVIĆ, Ana Marija

Session: Morning #2 (10:40 - 11:40)

-Conveners: Kenichi Kato

time	[id] title	presenter
10:40	[11] High sensitivity X-ray phase imaging system based on a Hartmann Wavefront Sensor	BEGANI PROVINCIALI, Ginevra
11:00	[20] The TRILL project: increasing the technological readiness level of Laue lenses for hard X/soft Gamma-ray astronomy	FERRO, Lisa
11:20	[25] X-ray micro-tomography as a method to distinguish and classify natural and cultivated pearls	VIGORELLI, Luisa

Session: Morning #3 (12:00 - 13:00)

-Conveners: Johann Marton

time	[id] title	presenter
12:00	[2] X-ray instrumentation to observe the hot and energetic Universe	PREDEHL, Peter
12:20	[46] Soft X-ray microscopy techniques at TwinMic - Elettra	ALESSANDRA, Gianoncelli
12:40	[31] X-ray imaging and space resolved spectroscopy of ECR plasmas in compact magnetic traps	NASELLI, Eugenia

Session: Afternoon #1 (14:00 - 15:00)

-Conveners: Andrea Zappettini

time	[id] title	presenter
14:00	[39] XSpecra®: an Advanced Technology for Improving Real-Time Inspections on Food Production-Lines	MACERA, Daniele
14:20	[26] Plasma-generated X-ray pulses: betatron radiation opportunities at EuPRAXIA@SPARC_LAB	STELLATO, Francesco
14:40	[19] Confocal fluorescence microscopy and confocal Raman microspectroscopy of X-ray irradiated LiF crystals	BONFIGLI, Francesca

Session: Afternoon #2 (15:15 - 16:40)

-Conveners: Héctor Jorge Sanchez

time	[id] title	presenter
15:15	[8] X-ray spectroscopy of kaonic atoms with TES-based microcalorimeters	HASHIMOTO, Tadashi
15:35	[48] VOXES: a millimetric effective source size HAPG crystals based Von Hamos spectrometer as a tool for extreme precision exotic atom spectroscopy	DE LEO, Veronica
15:55	[56] Mmpxrt - New X-ray tracing code not only for mosaic crystal spectrometers.	Dr ŠMÍD, Michal
16:15	[55] Talk competition winners announcement & closing remarks	SCORDO, Alessandro