IFDEPS Virtual Thursdays 2021
International Forum on Detectors for Photon Science

FULL PROGRAMME

Final version: 8 April 2021

Starting local time	North America				Brazil	UK	Europe	China Taiwan	Japan Korea	East Australia
	West	*Centr.CST*	*Centr.CDT*	*East*						
Thursday 25 March						1 p.m.	2 p.m.			12 p.m.
Thursday 1 April	6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	2 p.m.	3 p.m.	9 p.m.	10 p.m.	11 p.m.
Thursday 8 April										

Thursday 25 March

00:00 **Welcome to IFDEPS VT 2021** – *Pablo Fajardo (IFDEPS organisation)*

Session 1 - Facility overview reports I   chair: *Gabriella Carini*

+0:10 APS - Advanced Photon Source (ANL) – *Antonino Miceli*

+0:20 CHESS - Cornell High Energy Synchrotron Source – *Katherine Shanks*

+0:30 DESY - Deutsches Elektronen-Synchrotron – *Heinz Graafsma*

+0:40 DLS - Diamond Light Source – *Nicola Tartoni*

+0:50 ELETTRA Sincrotrone Trieste – *Ralf Menk*

+1:00 ESRF - The European Synchrotron – *Thierry Martin*

+1:10 European XFEL – *Monica Turcato*

+1:20 LCLS - Linear Coherent Light Source – *Mark McKelvey*

+1:30 LNLS - Brazilian Synchrotron Light Laboratory – *Jean Polli*

+1:40   *Breathing break*

Session 2 - Facility overview reports II   chair: *Pablo Fajardo*

+1:50 MAX IV Laboratory – *Paul Bell*

+2:00 NSRRC - National Synchrotron Radiation Research Center – *Yu-Shan Huang*

+2:10 PAL-XFEL - Pohang Accelerator Laboratory – *HyoJung Hyun*

+2:20 PSI - Paul Scherrer Institute – *Bernd Schmitt*

+2:30 SACLA - SPring-8 Angstrom Compact free electron Laser – *Takaki Hatsui*

+2:40 SHINE - Shanghai XFEL – *Zhi Liu*

+2:50 SPring-8 - Super Photon Ring 8 GeV – *Yasuhiko Imai*

+3:00 Synchrotron SOLEIL – *Fabienne Orsini*

+3:10 **Thursday wrap-up** – *Takaki Hatsui (IFDEPS organisation)*

Thursday 1 April

00:00   **Thursday opening**   –   *Pablo Fajardo (IFDEPS organisation)*

Session 3 - Deployment and application I

+0:05   Marco Ramilli (European XFEL GmbH) – *The JUNGFRAU and GOTTHARD-II detectors at European XFEL: status and plans*

+0:11   Jolanta Sztuk-Dambietz (European XFEL GmbH) – *1 Mpix Adaptive Gain Integrating Pixel Detector (AGIPD) at European XFEL – Experience with the detectors installed at SPB/SFX and MID Instruments*

+0:17   Michele Cascella (European XFEL GmbH) – *Gain calibration of the AGIPD detector using low intensity X-ray data*

+0:23   Arkadiusz Dawiec (Synchrotron Soleil) – *Characterization of the XSPA-500k photon counting detector at Synchrotron SOLEIL*

+0:29   *Discussion*   *moderator: Fabienne Orsini (SOLEIL)*

Session 4 - New detector projects: charge integration

+0:45   Stephan Stern (Center for Free-Electron Laser Science - CFEL) – *The new AGIPD detector generation*

+0:51   Alessandro Marras (DESY) – *Development of CoRDIA: a detector for diffraction limited SRs and CW FELs*

+0:57   Jiaguo Zhang (Paul Scherrer Institut) – *The high speed microstrip detector Gotthard-II: architecture, features and applications*

+1:03   Paolo Busca (ESRF) – *XIDER: a novel X-ray detector for the next generation of high-energy synchrotron radiation sources*

+1:09   *Discussion*   *moderator: Katherine Shanks (CHESS)*

+1:25   *Breathing break*

Session 5 - Readout, DAQ and online processing

+1:35   Zdenek Matej (Lund University) – *Azimuthal integration for fast X-ray area detectors on FPGAs*

+1:41   Toshiyuki Hiraki (RIKEN SPring-8 Center) – *Development of data acquisition and analysis infrastructure for high-speed X-ray imaging detector CITIUS*

+1:47   Nicolas Janvier (ESRF) – *RASHPA: A generic RDMA based distributed DAQ framework for high throughput X-ray detectors*

+1:53   Ryutaro Nishimura (Institute of Materials Structure Science) – *Development status of new readout system for SOI pixel detector using 10 Gb Ethernet SiTCP*

+1:59   ~~Dominik Gorni (Brookhaven National Laboratory) – *Event driven readout system with non-priority arbitration for radiation detectors*~~ *PRESENTATION WITHDRAWN*

+2:05   *Discussion*   *moderator: Nicola Tartoni (DLS)*

Session 6 - Energy dispersive detection

+2:25   Sang-Jun Lee (SLAC National Accelerator Laboratory) – *Application of TES spectrometers in advanced x-ray spectroscopy at SSRL*

+2:31   Galen Oneil (National Institute of Standards and Technology) – *Soft X-ray transition edge sensor spectrometers at SSRL*

+2:37   Francisco José Iguaz Gutiérrez (Synchrotron Soleil) – *Simulation of the signal response of x-ray spectroscopy detectors*

+2:43   Graham Dennis (Diamond Light Source Ltd) – *(Very) quick EXAFS using the timestamp capabilities of Xspress4 DPP at Diamond Light Source*

+2:49   *Discussion*   *moderator: Peter Siddons (BNL)*

+3:05   **Thursday wrap-up**   –   *Takaki Hatsui (IFDEPS organisation)*

Thursday 8 April

00:00 **Thursday opening** – *Pablo Fajardo, ESRF (IFDEPS organisation)*

Session 7 - Deployment and application II

+0:05 Matteo Porro (European XFEL GmbH) – *The DSSC soft X-ray camera with Mega-frame readout capability for the European XFEL*

+0:11 Kiana Setoodehnia (European XFEL GmbH) – *Calibration of a pnCCD detector at European XFEL*

+0:17 Cornelia Wunderer (DESY) – *The Percival 2-Megapixel soft X-ray system in first user experiments*

+0:23 Aldo Mozzanica (Paul Scherrer Institut) – *The JUNGFRAU as imaging detector for SwissFEL low energy beamline*

+0:29 *Discussion*   moderator: *Ralf Menk (ELETTRA)*

Session 8 - New detector projects: indirect detection

+0:45 Takashi Kameshima (SPring-8/JASRI) – *Development of a 200-nm-resolution X-ray imaging detector with a field of view of 2 mm square*

+0:51 Te-Hui Lee (NSRRC) – *CMOS X-ray strip detector development at NSRRC*

+0:57 *Discussion*   moderator: *Thierry Martin (ESRF)*

Session 9 - New detector projects: photon counting

+1:05 Anna Bergamaschi (Paul Scherrer Institut) – *MYTHEN III: the new microstrip detector for powder diffraction*

+1:11 Jonathan Correa / David Pennicard (DESY) – *TimePix4, a versatile timestamping pixel detector*

+1:17 Débora Magalhães (ESRF) – *SPHIRD: small pixel, high rate photon counting detector for synchrotron applications*

+1:23 *Discussion*   moderator: *Heinz Graafsma (DESY)*

+1:35 *Breathing break*

Session 10 - Sensors, components and technology

+1:45 HyoJung Hyun (Postech) – *Development of thermoelectric cooling system for the PERCIVAL detector*

+1:51 Anton Tremsin (University of California) – *Fast MCP/Timepix photon counting detectors with high spatial and timing resolution*

+1:57 Anton Tyazhev (Tomsk State University) – *Investigation of HR GaAs:Cr material and X-ray pad sensors made of VGF n-GaAs wafers*

+2:03 Abdul Rumaiz (Brookhaven National Laboratory, USA) – High-Z detectors for Photon Science

+2:09 Kristof Pauwels (ESRF) – *Structured scintillators review*

+2:15 *Discussion*   moderator: *Anna Bergamaschi (PSI)*

Session 11 - Advanced silicon sensor technology

+2:35 Giovanni Pinaroli (Brookhaven National Laboratory) – *Large-area, highly granular detectors for hard X-rays*

+2:41 Tomasz Hemperek (University of Bonn) – *Large area silicon sensors in advanced CMOS process*

+2:47 Hwan Bae Park (Kyungpook National University) – *Switch performance measurement of junction field effect transistor integrated in pixel sensor*

+2:53 Gabriele Giacomini (Brookhaven National Laboratory) – *Low-gain avalanche diodes for photon science*

+2:59 *Discussion*   moderator: *Mark McKelvey (SLAC)*

+3:10 **IFDEPS VT closure** – *Gabriella Carini (IFDEPS organisation)*