



International Workshop on
13th iWoRiD
Radiation Imaging Detectors

PAUL SCHERRER INSTITUT
PSI

Submission of Abstracts

The deadline for the submission of abstracts is 31.3.2011. Instructions and template are available on the workshop website.

Proceedings

Manuscripts submitted to the workshop will be reviewed and published in a special volume of JINST.

Registration and Fee

Online registration and all relevant information can be found on the workshop's website. The registration is estimated to be € 500, including daily coffee breaks, the reception on Sunday, the transfer to PSI and back, lunch on PSI site, conference bbq on Wednesday evening, boat trip on Monday evening. An early registration fee will be offered, see the website for more details.

Reduced registration fee available for PhD students:

To apply please send an email with a letter by your supervisor and a copy of the abstract to charlotte.heer@psi.ch.

Workshop Location

The workshop will be held on 3 days in the Federal Institute of Technology (ETH) in the center of Zurich. For one day the workshop will move to Paul Scherrer Institut in Villigen where there will be lectures in the morning.

In the afternoon, guided tours to SLS, SINQ and SwissFEL are on offer.

Further site information is on
www.ethz.ch and www.psi.ch, sls.web.psi.ch, sinq.web.psi.ch, fel.web.psi.ch

Tourist information about Zurich and its surroundings can be found at:
www.zurichtourism.ch

Accommodation

Zurich offers a large number of all types of hotels. A block allocation will be done at the end of this year and will be bookable through our website directly.

13th International Workshop on Radiation Imaging Detectors

3th – 7th July 2011
Zurich and Villigen PSI, Switzerland

Hosted by:
Paul Scherrer Institut, Switzerland

<http://indico.psi.ch/event/iworid2011>

Scientific Committee

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IWORLD

The International Workshops on Radiation Imaging Detectors are held yearly and provide an international forum for discussing current research and developments in the area of position sensitive detectors for radiation imaging, including semiconductor detectors, gas- and scintillator based detectors. Topics include processing and characterization of detector materials, design of photon counting or charge integrating electronics, hybridization and interconnect technologies, readout systems and application in various scientific and industrial fields.

Program

The workshop will have plenary sessions with invited and contributed papers presented orally and in poster sessions. The invited talks will be chosen to review recent advances in different areas covered in the workshop.

Sensor Materials, Device Processing & Technologies

- Silicon (single crystal and amorphous)
- Gallium Arsenide, Cadmium Telluride and other semiconductors
- 3D and edgeless sensors
- Processing
- Characterization
- Reliability
- Radiation damage
- Scintillators

Front-end Electronics and Readout

- Monolithic and hybrid systems
- Single photon counting and charge integrating front ends
- 3D ASICs
- Monolithic active pixel sensors
- CCDs
- Data readout architectures
- Hardware and software
- Data compression, transfer and storage

Interconnect Technologies

- Bump bonding
- High density interconnects
- Multi chip modules

Imaging theory

- Integrating vs counting mode
- Energy weighting
- Correction algorithms

Applications

- Material Analysis
- X-ray diffraction and fluorescence
- Protein crystallography
- Tomography, high resolution and fast imaging
- Biological and medical imaging
- Electron microscopy
- Security systems and other industrial applications
- Applications at X-ray free electron lasers
- Neutron imaging
- Astronomical and space applications
- High energy physics
- Nuclear physics
- Fusion research