

Workshop on Picosecond photon sensors Clermont 12-14 MARCH 2014 : Introduction

- The philosophy of this workshop follows the ones organised in Saclay (2007), IPN Lyon (2008), Chicago (2005, 2006, 2008 and 2011), Clermont Ferrand (2010), Cracow (2011). Links to these events can be found
- <http://psec.uchicago.edu/workshops/>

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"Towards 10 ps single soft photon detectors"

2013 IEEE NSS/MIC/RTSD Seoul
Sunday Oct 27, 2013


- 4 sessions
- 120 participants ...



Institute of Electrical and Electronics Engineers

2013 IEEE NSS/MIC/RTSD

Nuclear Science Symposium & Medical Imaging Conference
& Workshop on Room-Temperature Semiconductor
X-Ray and Gamma-Ray Detectors



SP1 Status & Outlook of SiPMs

- SP1-0, Opening Talk - Harry van der Graaf, Nikhef, TU-Delft
- SP1-1, CMOS Circuitry Beyond the Limit - E. C. Charbon, Delft University of Technology, Netherlands
- SP1-2, SiPM's Timing Properties - E. Popova, National Research Nuclear University Moscow, Russia
- SP1-3, SPADnet: from Concept to Realization - C. Bruschini, Ecole Polytechnique Federale de Lausanne, Switzerland

SP2 New Technologies, Materials, and Theoretical Support

- P2-1, The Transmission Dynode Electron Multiplier -H. van der Graaf, Nikhef, Netherlands
- SP2-2, Status, outlook and limitations of Micro Channel Plates from the Large Area Picosecond PhotoDetector (LAPPD) perspective - G. Varner, University of Hawaii, USA
- SP2-3, Towards a superconducting nanowire single soft photon detector with 10 ps temporal resolution - S. Dorenbos, Delft University of Technology, Netherlands
- SP2-4, Alkali Antimonide Photocathodes - a Materials Perspective
J. Smedley, Brookhaven BNL, USA
- SP2-5, Development of photon detectors with Diamond coated dynodes
B. Seitz, University of Glasgow, UK
- SP2-6, Theoretical aspects; specific solid state physics for electron emission and vacuum electron multipliers S. Tao, NIKHEF, Netherlands
- SP2-7, Design Criteria, Advantages and Tradeoffs of 3D Single Photon Counting Modules for Tens of ps Resolution - R. Fontaine, Université de Sherbrooke, Canada

SP3 Industry's View on 10 ps detectors

- SP3-1, Latest vacuum photo detectors and technologies from Hamamatsu - K. Makita, Hamamatsu Photonics, Japan
- SP3-2, Time stamp generation in Digital Photon Counters (DPC's): advantages & challenges - R. Schulze, Philips, Germany
- SP3-3, Fast Photon Detectors - E. Schyns, Photonis, Netherlands

SP4 Applications

- SP4-1, Using fast photon sensors in RICH counters -
S. Kononov, Budker Institute of Nuclear Physics, Russia
- SP4-2, Prospects for sub-100 ps TOF and PET -
D. R. Schaart, Delft University of Technology, Netherlands
- SP4-3, Topsy & Trixy: applications of dynode vacuum
amplifiers in radiation technology - H. van der Graaf,
Nikhef, Netherlands