

Workshop on picosecond photon sensors for physics and medical applications

Report of Contributions

Contribution ID: 0

Type: **not specified**

Welcome

Wednesday 12 March 2014 13:30 (15 minutes)

Presenters: ROYON, Christophe (CEA/IRFU,Centre d'étude de Saclay Gif-sur-Yvette (FR)); MONTAROU, Gerard (Universite Blaise Pascal de Clermont-Ferrand II); LE DU, Patrick (IPN Lyon)

Session Classification: Introduction session

Contribution ID: 1

Type: **not specified**

Fast timing recent development and overview - Highlights from the 2013 NSS-MIC conference

Wednesday 12 March 2014 13:45 (15 minutes)

Presenter: LE DU, Patrick (IPN Lyon)

Session Classification: Introduction session

Contribution ID: 2

Type: **not specified**

LAPPD status

Wednesday 12 March 2014 14:00 (25 minutes)

Presenter: SIEGMUND, Oswald (University of California, Berkeley)

Session Classification: Photodetector session I

Contribution ID: 3

Type: **not specified**

PPS/Timing with Si (vidyo)

Wednesday 12 March 2014 14:25 (25 minutes)

Presenter: Mr CARTIGLIA, Nicolo (INFN)

Session Classification: Photodetector session I

Contribution ID: 4

Type: **not specified**

Application of atomic layer deposited microchannel plates to fast timing, imaging detectors

Wednesday 12 March 2014 14:50 (25 minutes)

Presenter: SIEGMUND, Oswald (University of California, Berkeley)

Session Classification: Photodetector session I

Contribution ID: 5

Type: **not specified**

The TORCH PMT, a close packing, multi-anode, long life MCP-PMT for Cherenkov applications

Wednesday 12 March 2014 16:00 (25 minutes)

Presenter: MILNES, James

Session Classification: Photodetector session II

Contribution ID: 6

Type: **not specified**

Diamond detector (vidyo)

Wednesday 12 March 2014 16:25 (25 minutes)

Presenter: Dr CHIODINI, Gabriele (Universita del Salento (IT))

Session Classification: Photodetector session II

Contribution ID: 7

Type: **not specified**

Fundamental limits on the time resolution of the scintillation detectors:timing

Wednesday 12 March 2014 16:50 (25 minutes)

Presenter: Dr SCHAART, Dennis (Delft University of Technology)

Session Classification: Photodetector session II

Contribution ID: 8

Type: **not specified**

PSEC4 electronics (vidyo)

Wednesday 12 March 2014 17:15 (25 minutes)

Presenter: OBERLA, eric (uchicago)

Session Classification: Photodetector session II

Contribution ID: 9

Type: **not specified**

Measuring time with a 5-ps precision at the system level with the WaveCatcher family of SCA-based fast digitizers

Thursday 13 March 2014 09:00 (25 minutes)

Presenter: BRETON, Dominique Robert (Universite de Paris-Sud 11 (FR))

Session Classification: Electronics and readout session I

Contribution ID: **10**

Type: **not specified**

A new timing calibration method for Switched Capacitor Array chips to achieve sub-picosecond resolutions

Thursday 13 March 2014 09:25 (25 minutes)

Presenter: Dr RITT, Stefan (Paul Scherrer Institute)

Session Classification: Electronics and readout session I

Contribution ID: **11**

Type: **not specified**

SAMPIC: a 16-channel self-triggered waveform-based TDC chip with ps timing capabilities

Thursday 13 March 2014 09:50 (25 minutes)

Presenter: DELAGNES, Eric (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR))

Session Classification: Electronics and readout session I

Contribution ID: 12

Type: **not specified**

Signal Processing for Fast Photo-detectors

Thursday 13 March 2014 11:00 (25 minutes)

Presenter: GENAT, Jean-Francois (CNRS/IN2P3)

Session Classification: Electronics and readout session II

Contribution ID: **13**

Type: **not specified**

An application of the DRS4 chip : the ASM Board

Thursday 13 March 2014 11:25 (25 minutes)

Presenter: MAGNE, Magali (Univ. Blaise Pascal Clermont-Fe. II (FR))

Session Classification: Electronics and readout session II

Contribution ID: 14

Type: **not specified**

The use of ASM board for dose control in hadrontherapy

Thursday 13 March 2014 11:50 (25 minutes)

Presenter: LESTAND, Loic

Session Classification: Electronics and readout session II

Contribution ID: 15

Type: **not specified**

Advanced technique for high accuracy tunable ring oscillator vernier TDC in FPGAs and ASICs

Thursday 13 March 2014 12:15 (25 minutes)

Presenter: GIRERD, Claude

Session Classification: Electronics and readout session II

Contribution ID: **16**

Type: **not specified**

Mordicus software and sampic tests

Thursday 13 March 2014 12:40 (25 minutes)

Presenter: STELMAKH, Georgiy

Session Classification: Electronics and readout session II

Contribution ID: 17

Type: **not specified**

Lifetime of Microchannel-Plate

Thursday 13 March 2014 14:00 (25 minutes)

Presenter: BRITTING, Alexander Wolfgang (Friedrich-Alexander-Univ. Erlangen (DE))

Session Classification: Application session I

Contribution ID: **18**

Type: **not specified**

Development of fast frontend electronics for single-photon timing in RICH counters

Thursday 13 March 2014 14:25 (25 minutes)

Presenter: HOEK, Matthias (University of Glasgow)

Session Classification: Application session I

Contribution ID: **19**

Type: **not specified**

LHCb Torch

Thursday 13 March 2014 14:50 (25 minutes)

Presenter: VAN DIJK, Maarten (University of Bristol (GB))

Session Classification: Application session I

Contribution ID: **20**

Type: **not specified**

Plans for a Picosecond HPTDC

Thursday 13 March 2014 15:15 (25 minutes)

Presenter: PINFOLD, James (University of Alberta (CA))

Session Classification: Application session I

Contribution ID: 21

Type: **not specified**

Picosecond gas Cerenkov detectors

Thursday 13 March 2014 15:40 (25 minutes)

Presenter: PIOTRZKOWSKI, Krzysztof (Universite Catholique de Louvain (UCL) (BE))

Session Classification: Application session I

Contribution ID: 22

Type: **not specified**

QUARTIC (vidyo)

Thursday 13 March 2014 16:30 (25 minutes)

Presenter: ALBROW, Michael (Fermi National Accelerator Lab. (US))

Session Classification: Application session II

Contribution ID: 23

Type: **not specified**

Fundamental Limits of Timing Resolution for Scintillation Detectors

Thursday 13 March 2014 16:55 (25 minutes)

Presenter: MOSES, William (Lawrence Berkeley National Laboratory)

Session Classification: Application session II

Contribution ID: 24

Type: **not specified**

Ultimate Time Resolution in Calorimetry and Time-of-Flight PET

Thursday 13 March 2014 17:20 (25 minutes)

Presenter: LECOQ, Paul (CERN)

Session Classification: Application session II

Contribution ID: 25

Type: **not specified**

Particle therapy : need for fast timing

Thursday 13 March 2014 17:45 (25 minutes)

Presenter: RINALDI, Ilaria

Session Classification: Application session II

Contribution ID: 26

Type: **not specified**

TOF-PET concept with axial geometry and digital SiPM readout

Thursday 13 March 2014 18:10 (25 minutes)

Presenter: CASELLA, Chiara (Eidgenoessische Tech. Hochschule Zuerich (CH))

Session Classification: Application session II

Contribution ID: 27

Type: **not specified**

Timing detectors for proton tagging at the LHC

Friday 14 March 2014 09:00 (25 minutes)

Presenter: ROYON, Christophe (CEA/IRFU,Centre d'étude de Saclay Gif-sur-Yvette (FR))

Session Classification: Application session III: Forward Physics

Contribution ID: 28

Type: **not specified**

Timing detectors for Totem (vidyo)

Friday 14 March 2014 09:25 (25 minutes)

Presenter: BAECHLER, Joachim (CERN)

Session Classification: Application session III: Forward Physics

Contribution ID: 29

Type: **not specified**

Role of timing in pileup mitigation for CMS Phase II upgrades

Friday 14 March 2014 09:50 (25 minutes)

Presenter: Prof. WHITE, Sebastian (Rockefeller University (US))

Session Classification: Application session III: Forward Physics

Contribution ID: **30**

Type: **not specified**

Fast timing system for LHC time-of-flight detector

Friday 14 March 2014 10:15 (25 minutes)

Presenter: BRANDT, Andrew Gerhart (University of Texas at Arlington (US))

Session Classification: Application session III: Forward Physics

Contribution ID: **31**

Type: **not specified**

Fast timing electronics

Friday 14 March 2014 11:00 (25 minutes)

Presenter: RIJSSENBEEK, Michael (State University of New York (US))

Session Classification: Application session IV: Forward Physics

Contribution ID: 32

Type: **not specified**

Picosecond Photon Detectors for the LHC - Radio Frequency Streak Camera

Friday 14 March 2014 11:25 (25 minutes)

Presenter: MARGARYAN, Amur (Alikhanian National Science Laboratory)

Session Classification: Application session IV: Forward Physics

Contribution ID: 33

Type: **not specified**

Discussion and conclusion

Friday 14 March 2014 11:50 (40 minutes)

Session Classification: Application session IV: Forward Physics