

Workshop on picosecond timing detectors for physics and medical applications

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Thursday, 15 September 2016 10:00 (30 minutes)

Presenter: ROYON, Christophe (The University of Kansas (US))

Contribution ID: 2

Type: **not specified**

Photomultiplier Development over the last 25 years

Thursday, 15 September 2016 10:30 (30 minutes)

Presenter: HOWORTH, Jon

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects I

Contribution ID: 3

Type: **not specified**

PHOTONIS's new developments

Thursday, 15 September 2016 11:00 (30 minutes)

Presenter: ORTEGA, Requel

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects I

Contribution ID: 4

Type: **not specified**

Large Area Picosecond Photo-Detector (LAPPD): Status and Perspectives

Thursday, 15 September 2016 11:30 (30 minutes)

Presenter: LYASHENKO, Alexey

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects I

Contribution ID: 5

Type: **not specified**

High density Multi-anode MCP-PMT readout techniques and applications

Thursday, 15 September 2016 13:30 (30 minutes)

Presenter: CONNEELY, Thomas (Photek LTD)

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects II

Contribution ID: 6

Type: **not specified**

Fabrication and Characterization of Low-cost Microchannel Plate Photodetectors for Fast-timing Applications

Thursday, 15 September 2016 14:00 (30 minutes)

Presenter: WANG, Jingbo (Argonne National Laboratory)

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects II

Contribution ID: 7

Type: **not specified**

The new transmission dynode "tynode" and its application in the Topsy ultra fast soft photon detector

Thursday, 15 September 2016 14:30 (30 minutes)

Presenter: VAN DER GRAAF, Harry (Nikhef National institute for subatomic physics (NL))

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects II

Contribution ID: 8

Type: **not specified**

TORCH project (Time Of internally Reflected CHerenkov light)

Thursday, 15 September 2016 15:30 (30 minutes)

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

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects III

Contribution ID: 9

Type: **not specified**

Cherenkov TOF prototype for AFP - results of Test Beam measurements

Thursday, 15 September 2016 16:00 (30 minutes)

Presenter: NOZKA, Libor (Palacky University (CZ))

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects III

Contribution ID: **10**

Type: **not specified**

Discussion session: Time and Space Resolution with Photodetectors

Thursday, 15 September 2016 17:00 (1 hour)

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects III

Contribution ID: **11**

Type: **not specified**

GasTof

Friday, 16 September 2016 09:00 (30 minutes)

Presenters: PIOTRZKOWSKI, Krzysztof (Universite Catholique de Louvain (UCL) (BE)); FORTHOMME, Laurent (The University of Kansas (US))

Session Classification: Timing in tracking/Gaseous Detectors

Contribution ID: 12

Type: **not specified**

Design Considerations for a precision timing vertex detector

Friday, 16 September 2016 09:30 (30 minutes)

Presenter: VARNER, Gary (University of Hawaii)

Session Classification: Timing in tracking/Gaseous Detectors

Contribution ID: 13

Type: **not specified**

Timing with diamond detectors in TOTEM

Friday, 16 September 2016 10:00 (30 minutes)

Presenter: MINAFRA, Nicola (The University of Kansas (US))

Session Classification: Timing in Solid State/diamond Detectors I

Contribution ID: 14

Type: **not specified**

Development of UFSD thin silicon sensors for timing applications

Friday, 16 September 2016 11:00 (30 minutes)

Presenter: ARCIDIACONO, Roberta (Universita e INFN Torino (IT))

Session Classification: Timing in Solid State/diamond Detectors II

Contribution ID: 15

Type: **not specified**

Timing Detectors Between Jefferson Lab and CERN

Friday, 16 September 2016 11:30 (30 minutes)

Presenter: AL GHOUL, Hussein (The University of Kansas (US))

Session Classification: Timing in Solid State/diamond Detectors II

Contribution ID: 16

Type: **not specified**

Discussion session: timing with Gaseous/solid state/diamond detectors

Friday, 16 September 2016 12:00 (30 minutes)

Session Classification: Timing in Solid State/diamond Detectors II

Contribution ID: 17

Type: **not specified**

Test Beam Studies of Silicon Timing for Use in Calorimetry

Friday, 16 September 2016 14:30 (30 minutes)

Presenter: APRESYAN, Artur (Fermi National Accelerator Lab. (US))

Session Classification: Timing in calorimeters

Contribution ID: **18**

Type: **not specified**

Fast Timing R&D at Fermilab

Friday, 16 September 2016 14:00 (30 minutes)

Presenter: RAMBERG, erik (Fermilab)

Session Classification: Timing in calorimeters

Contribution ID: 19

Type: **not specified**

Direct tests of a pixelated microchannel plate as the active element of a shower maximum detector

Friday, 16 September 2016 15:00 (30 minutes)

Presenter: PENA HERRERA, Cristian Ignacio (California Institute of Technology (US))

Session Classification: Timing in calorimeters

Contribution ID: 20

Type: **not specified**

Algorithms for timing measurements using a fast sampling device

Friday, 16 September 2016 16:00 (30 minutes)

Presenter: MINAFRA, Nicola (The University of Kansas (US))

Session Classification: Timing algorithms / discussion

Contribution ID: 21

Type: **not specified**

Discussion session: timing detectors and algorithms

Friday, 16 September 2016 16:30 (1 hour)

Session Classification: Timing algorithms / discussion

Contribution ID: 22

Type: **not specified**

Progress towards 10ps TOFPET resolution on scintillator-based detectors

Saturday, 17 September 2016 09:00 (30 minutes)

Presenter: LECOQ, Paul Rene Michel

Session Classification: Timing in medical/engineering applications I

Contribution ID: 23

Type: **not specified**

PET Detector Review and Digital SPAD Scintillation Detector Simulation Flow to Evaluate and Minimize Real-Time Requirements

Saturday, 17 September 2016 09:30 (30 minutes)

Presenter: TÉTRAULT, Marc-André (Université de Sherbrooke)

Session Classification: Timing in medical/engineering applications I

Contribution ID: 24

Type: **not specified**

SiPMs as photosensors for a Cherenkov based TOF PET device

Saturday, 17 September 2016 10:00 (30 minutes)

Presenter: DOLENEC, Rok (Institut "Jožef Stefan")

Session Classification: Timing in medical/engineering applications I

Contribution ID: 25

Type: **not specified**

tba

Presenter: SALANDRINO, Alessandro

Session Classification: Timing in physics

Contribution ID: 26

Type: **not specified**

SAMPIC fast timing electronics

Saturday, 17 September 2016 11:30 (30 minutes)

Presenters: BRETON, Dominique Robert (Laboratoire de l'Accelérateur Lineaire (FR)); MAALMI, Jihane (Laboratoire de l'Accelérateur Lineaire (FR))

Session Classification: Front-end electronics I

Contribution ID: 27

Type: **not specified**

New readout electronics for Ultra fast Si

Saturday, 17 September 2016 12:00 (30 minutes)

Presenter: MINAFRA, Nicola (The University of Kansas (US))

Session Classification: Front-end electronics I

Contribution ID: 28

Type: **not specified**

The WaveDAQ system: Picosecond measurements with 10'000 channels

Saturday, 17 September 2016 14:00 (30 minutes)

Presenter: RITT, Stefan (Paul Scherrer Institut (CH))

Session Classification: Front-end electronics II

Contribution ID: 29

Type: **not specified**

TRB/Padiwa/DiRich FEE electronics with ~10ps precision FPGA-TDCs for MA-PMT/MCP-PMT readout: Results, Experiences and Problems

Saturday, 17 September 2016 14:30 (30 minutes)

Presenter: TRAXLER, Michael (GSI Helmholtzzentrum für Schwerionenforschung GmbH)

Session Classification: Front-end electronics II

Contribution ID: **30**

Type: **not specified**

Electronics test results (tab)

Presenter: GRABAS, Herve Marie Xavier (University of California, Santa Cruz (US))

Session Classification: Front-end electronics II

Contribution ID: 31

Type: **not specified**

THz timing processor with extended dynamic range

Saturday, 17 September 2016 16:00 (30 minutes)

Presenter: ZHAMKOCHYAN, Simon

Session Classification: Electronics Systems and Code Support

Contribution ID: 32

Type: **not specified**

Superconductor 100 GHz digital electronics for detector instrumentation.

Saturday, 17 September 2016 16:30 (30 minutes)

Presenter: SARWANA, Saad

Session Classification: Electronics Systems and Code Support

Contribution ID: 33

Type: **not specified**

The Development of Electronics for Fast Timing

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

Session Classification: Electronics Systems and Code Support

Contribution ID: 34

Type: **not specified**

Discussion session: electronics / timing in medicine/engineering

Saturday, 17 September 2016 17:00 (45 minutes)

Session Classification: Electronics Systems and Code Support

Contribution ID: 35

Type: **not specified**

Application of UFSD sensors to High Energy Physics Experiments

Thursday, 15 September 2016 16:30 (30 minutes)

Presenter: CARTIGLIA, Nicolo (INFN)

Session Classification: Time and Space Resolution with Photodetectors -Present Status, Results, Prospects III

Contribution ID: **36**

Type: **not specified**

CT-PPS project a the LHC

Sunday, 18 September 2016 10:00 (30 minutes)

Presenter: FORTHOMME, Laurent (The University of Kansas (US))

Session Classification: Applications for Colliders, Dark Matter and Neutrinoless Double Beta Decay I...

Contribution ID: 37

Type: **not specified**

The AFP project at the LHC

Saturday, 17 September 2016 11:00 (30 minutes)

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

Session Classification: Timing in physics

Contribution ID: **38**

Type: **not specified**

Timing detectors for physics at the LHC

Sunday, 18 September 2016 09:30 (30 minutes)

Presenter: ROYON, Christophe (The University of Kansas (US))

Session Classification: Applications for Colliders, Dark Matter and Neutrinoless Double Beta Decay I...

Contribution ID: 39

Type: **not specified**

Potential for timing measurements at the Electron Ion Collider

Sunday, 18 September 2016 09:00 (30 minutes)

Presenter: MURRAY, Michael (The University of Kansas (US))

Session Classification: Applications for Colliders, Dark Matter and Neutrinoless Double Beta Decay I...

Contribution ID: 40

Type: **not specified**

Discussion: timing applications in high energy/nuclear physics, medicine, engineering; plans for this year

Sunday, 18 September 2016 11:00 (50 minutes)

Session Classification: Applications for Colliders, Dark Matter and Neutrinoless Double Beta Decay II...

Contribution ID: 41

Type: **not specified**

Final conclusion

Sunday, 18 September 2016 12:20 (10 minutes)

Presenter: ROYON, Christophe (The University of Kansas (US))

Contribution ID: 42

Type: **not specified**

Advanced particle flow with timing information (tbc)

Saturday, 17 September 2016 15:00 (30 minutes)

Presenter: WILSON, Graham (The University of Kansas (US))

Session Classification: Front-end electronics II