

RD51 Mini-Week

Report of Contributions

Contribution ID: **10**

Type: **not specified**

A simple model for the gain drop in micro-Resistive WELL

Presenter: MORELLO, Gianfranco (LNF)

Contribution ID: 11

Type: **not specified**

Graphite coating at Tsinghua University

Presenter: WANG, Yi (Tsinghua University)

Contribution ID: 12

Type: **not specified**

Surface uniformity in graphite-painted sTGCs and its impact

Presenter: MIKENBERG, George (Weizmann Institute of Science (IL))

Contribution ID: 13

Type: **not specified**

Robust ceramic composites with tunable electric properties

Presenter: PECHARROMAN, Carlos (ICNM)

Contribution ID: 14

Type: **not specified**

Low resistivity Chinese Glass

Presenter: WANG, Yi (Tsinghua University)

Contribution ID: 15

Type: **not specified**

Resistive Well

Presenter: BRESSLER, Shikma (Weizmann Institute of Science (IL))

Contribution ID: **16**

Type: **not specified**

Electric fields and signals in detectors with resistive materials

Presenter: RIEGLER, Werner (CERN)

Contribution ID: 17

Type: **not specified**

Characterization of resistive foils as a function of humidity, temperature and integrated charge

Presenter: SIDIROPOULOU, Ourania (Bayerische Julius Max. Universitaet Wuerzburg (DE))

Contribution ID: **18**

Type: **not specified**

Characterization of protection layers in pixelised MPGDs

Presenter: HARTJES, Frederik (Nikhef National institute for subatomic physics (NL))

Contribution ID: **19**

Type: **not specified**

Resistive paste, spiders, buried resistors and other photolithography tricks

Presenter: DE OLIVEIRA, Rui (CERN)

Contribution ID: 20

Type: **not specified**

Round table

Presenters: GONZALEZ DIAZ, Diego (Uludag University (TR)); CHEFDEVILLE, Maximilien (Centre National de la Recherche Scientifique (FR)); DE OLIVEIRA, Rui (CERN); DALLA TORRE, Silvia (Universita e INFN, Trieste (IT))

Contribution ID: 21

Type: **not specified**

Screen-printing at Saclay workshop

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

Contribution ID: 34

Type: **not specified**

GEMs made in India

Presenter: DUBEY, Anand Kumar (Department of Atomic Energy (IN))

Contribution ID: 35

Type: **not specified**

Status of the new building at CERN

Presenter: DE OLIVEIRA, Rui (CERN)

Contribution ID: **36**

Type: **not specified**

BES test beam in H4

Presenter: CIBINETTO, Gianluigi (INFN Ferrara)

Contribution ID: 37

Type: **not specified**

LNF & SHIP test beam in H4

Presenter: BENCIVENNI, Giovanni (Istituto Nazionale Fisica Nucleare Frascati (IT))

Contribution ID: **38**

Type: **not specified**

ATLAS umegas test beam in H4

Presenter: ALEXOPOULOS, Theodoros (National Technical Univ. of Athens (GR))

Contribution ID: 39

Type: **not specified**

CMS GEM test beam in H4

Presenters: DORNEY, Brian (CERN); VAI, Ilaria (Universita e INFN, Pavia (IT))

Contribution ID: 40

Type: **not specified**

DCS and enviromental parameter measurements with the arduino

Presenter: PAPAKRIVOPOULOS, Yannis (National Technical Univ. of Athens (GR))

Contribution ID: 44

Type: **not specified**

Performance of a triple GEM prototype in magnetic field for the BESIII experiment

Presenter: MEZZADRI, Giulio (Universita di Ferrara & INFN (IT))

Contribution ID: 45

Type: **not specified**

Further laboratory investigation of the RPWELL

Presenter: SHAKED, Dan (Weizmann Institute of Science (IL))

Contribution ID: 47

Type: **not specified**

First tests of resistive Kapton LEM in Dual Phase LAr TPC

Presenter: WU, Shuoxing (Eidgenoessische Tech. Hochschule Zuerich (CH))

Contribution ID: 51

Type: **not specified**

Discharge studies with single GEMs

Presenter: DEISTING, Alexander (Ruprecht-Karls-Universitaet Heidelberg (DE))

Contribution ID: 54

Type: **not specified**

Status of developments for ACTAR TPC

Presenter: GIOVINAZZO, Jerome (Centre National de la Recherche Scientifique (FR))

Contribution ID: 62

Type: **not specified**

ScanPyramid, the project and the recent deployment of Micromegas muography chamber

Presenters: PROCUREUR, Sebastien (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR)); BOUTEILLE, Simon (CEA/IRFU,Centre d'etude de Saclay Gif-sur-Yvette (FR))

Contribution ID: **64**

Type: **not specified**

Test Beam News

Presenters: OLIVERI, Eraldo (CERN); TSIPOLITIS, Yorgos (National Technical Univ. of Athens (GR))

Contribution ID: 65

Type: **not specified**

Optical readout

Presenter: BRUNBAUER, Florian Maximilian (CERN, Vienna University of Technology (AT))

Contribution ID: **66**

Type: **not specified**

CMS GEM H4 test beam

Presenter: VAI, Ilaria (Universita e INFN, Pavia (IT))

Contribution ID: 67

Type: **not specified**

Picosec H4 test beam

Summary

Presenters: LUPBERGER, Michael (CERN); PAPADEVANGELOU, Thomas (CEA/IRFU, Centre d'étude de Saclay Gif-sur-Yvette (FR))

Contribution ID: **68**

Type: **not specified**

BES III H4 test beam

Presenter: FARINELLI, Riccardo (Universita di Ferrara & INFN (IT))

Contribution ID: 70

Type: **not specified**

ORANGE: tracking particles with optically readout GEM

Presenter: PINCI, Davide (Universita e INFN, Roma I (IT))

Contribution ID: 71

Type: **not specified**

On the possibility of positive-ion detection in high-pressure TPCs

Presenter: ARAZI, Lior (Weizmann Institute of Science)

Contribution ID: 72

Type: **not specified**

Recent advances in bubble-assisted liquid hole multipliers

Presenter: ARAZI, Lior (Weizmann Institute of Science)

Contribution ID: 73

Type: **not specified**

Recent Results from Small Pads Resistive Micromegas

Presenter: PETRUCCI, Fabrizio (Roma Tre Universita Degli Studi (IT))

Contribution ID: 74

Type: **not specified**

Precise time tagging of MIPs with Micromegas

Presenter: OLIVERI, Eraldo (CERN)

Contribution ID: 75

Type: **not specified**

GEM-based alternatives for Ion Backflow suppression

Presenter: NATAL DA LUZ, Hugo (Universidade de São Paulo (BR))

Contribution ID: 76

Type: **not specified**

Long term gas stability of the HARPO detector under HV

Summary

Presenter: GROS, Philippe (Centre National de la Recherche Scientifique (FR))

Contribution ID: 77

Type: **not specified**

Test beam results of a quad GridPix TPC with focused electric drift field

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

Contribution ID: 78

Type: **not specified**

A general-purpose and GridPix-based ‘Quad’ modular readout system for TPCs

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

Contribution ID: 79

Type: **not specified**

Multiplexing of the readout of a TPC with pads : a quantitative study

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

Contribution ID: **80**

Type: **not specified**

Recent achievements on u-RWELL

Presenter: MORELLO, Gianfranco (Istituto Nazionale Fisica Nucleare Frascati (IT))

Contribution ID: **81**

Type: **not specified**

Simulation of HARPO and its calibration/validation; use for the correction of systematics in our measurement of gamma ray polarisation

Presenter: GROS, Philippe (LLR)

Contribution ID: **82**

Type: **not specified**

Investigations of the position resolution of Gd-GEM detectors

Presenter: PFEIFFER, Dorothea (CERN)

Contribution ID: 83

Type: **not specified**

Microscopic simulation of Xenon-based gaseous optical TPCs in the presence of molecular additives

Presenters: AZEVEDO, Carlos (University of Aveiro); GONZALEZ DIAZ, Diego (Uludag University (TR))

Contribution ID: 84

Type: **not specified**

Timing Performance of A-PIC at High Rate

Presenter: GARCIA FUENTES, Francisco Ignacio (Helsinki Institute of Physics (FI))

Contribution ID: **85**

Type: **not specified**

SRS electronics in 2016

Presenter: MULLER, Hans

Contribution ID: **86**

Type: **not specified**

Status of VMM3 ASIC

Presenters: IAKOVIDIS, George (Brookhaven National Laboratory (US)); POLYCHRONAKOS, Venetios (Brookhaven National Laboratory (US))

Contribution ID: 87

Type: **not specified**

VMM and the SRS - update

Summary

Presenters: PFEIFFER, Dorothea (CERN); LUPBERGER, Michael (CERN)

Contribution ID: **88**

Type: **not specified**

SRS Purchase licences for teams

Presenter: SANTOS RODRIGUES DE ARAUJO, Tiago Sergio (FCT Fundacao para a Ciencia e a Tecnologia (PT))

Contribution ID: 89

Type: **not specified**

Production issues with Bulk Micromegas for the CLAS12 experiment.

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

Contribution ID: **90**

Type: **not specified**

MPGD production at Cern

Presenter: DE OLIVEIRA, Rui (CERN)

Contribution ID: 92

Type: **not specified**

A progress report on the analysis of pico-MM test beam data

Summary

Presenter: TZAMARIAS, Spyros (Aristotle University of Thessaloníki (GR))

Contribution ID: 93

Type: **not specified**

Triggerable and time-tagged X-ray generator

Presenter: RESNATI, Filippo (CERN)

Contribution ID: 94

Type: **not specified**

Polyimide etching studies in GEMs under Cu X-Ray irradiation

Presenter: ZAVAZIEVA, Darina

Contribution ID: 95

Type: **not specified**

PICOSEC, a timing study

Presenter: Dr WHITE, Sebastian (CERN/Princeton University (US))

Contribution ID: 96

Type: **not specified**

Testbeam results obtained with a gaseous pixel detector based on Timepix3 chip

Thursday 23 February 2017 11:00 (20 minutes)

Presenter: TSIGARIDAS, Stergios (Nikhef National institute for subatomic physics (NL))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: 97

Type: **not specified**

“Spark” testbeam, where 8 GridPix detectors where exposed in high rate hadrons

Thursday 23 February 2017 11:20 (20 minutes)

Presenter: TSIGARIDAS, Stergios (Nikhef National institute for subatomic physics (NL))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: 98

Type: **not specified**

Status of the 3x1x1 m³ double phase LAr detector

Thursday 23 February 2017 09:00 (20 minutes)

Presenter: MURPHY, Sebastien (Eidgenoessische Tech. Hochschule Zuerich (CH))

Session Classification: WG1 - New Structures and Technologies

Contribution ID: 99

Type: **not specified**

Update on new tools and test facilities at RD51 GDD lab

Thursday 23 February 2017 09:20 (20 minutes)

Presenter: BRUNBAUER, Florian Maximilian (CERN, Vienna University of Technology (AT))

Session Classification: WG1 - New Structures and Technologies

Contribution ID: **100**Type: **not specified**

Welcome

Tuesday 21 February 2017 09:00 (5 minutes)

This workshop is intended to address the needs of a rapidly developing interest group in RD51 for fast timing with micro-pattern gas detectors. Current results from the RD51 PICOSEC project demonstrate feasibility of MPGD-based timing devices in the <50 picosecond regime. Many topics are nevertheless still to be addressed: lifetime of photocathodes/SEM's, scaling to large area coverage, spark protection, digital electronics and so on. Some of these topics are in common with other R&D projects (not based on MPGDs). Our aim is to get an overview of different aspects (detectors, electronics, analysis, testing and infrastructures) of fast and precise timing detectors including a few examples of alternate technology, in view of future steps.

Summary

Presenters: ROPELEWSKI, Leszek (CERN); DALLA TORRE, Silvia (Universita e INFN, Trieste (IT))

Session Classification: Precise timing workshop

Contribution ID: **101**

Type: **not specified**

Intro

Tuesday 21 February 2017 09:05 (15 minutes)

Summary

Presenters: WHITE, Sebastian (CERN/Princeton University (US)); OLIVERI, Eraldo (CERN)

Session Classification: Precise timing workshop

Contribution ID: **102**

Type: **not specified**

Fast timing with Micromegas: Status and Plans

Tuesday 21 February 2017 09:20 (25 minutes)

Summary

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

Session Classification: Precise timing workshop

Contribution ID: **103**

Type: **not specified**

Using Fast Timing to Separate Scintillation and Cherenkov Light for THEIA at Homestake

Tuesday 21 February 2017 15:40 (25 minutes)

Presenter: KLEIN, Josh (University of Pennsylvania)

Session Classification: Precise timing workshop

Contribution ID: **104**

Type: **not specified**

FAST project - Precision timing with crystal + SiPM

Tuesday 21 February 2017 10:15 (25 minutes)

Presenter: LUCCHINI, Marco Toliman (CERN)

Session Classification: Precise timing workshop

Contribution ID: **105**

Type: **not specified**

Results and Plans for HyperFast Silicon based on 2016 PICOSEC data

Tuesday 21 February 2017 11:00 (25 minutes)

Presenter: WHITE, Sebastian (CERN/Princeton University (US))

Session Classification: Precise timing workshop

Contribution ID: **106**

Type: **not specified**

The LAPPD Project

Tuesday 21 February 2017 11:25 (25 minutes)

Presenter: MINOT, Michael J. (Incom)

Session Classification: Precise timing workshop

Contribution ID: **107**

Type: **not specified**

TOTEM timing Detector

Tuesday 21 February 2017 12:15 (25 minutes)

Summary

Presenter: BERRETTI, Mirko (Helsinki Institute of Physics (FI))

Session Classification: Precise timing workshop

Contribution ID: **108**

Type: **not specified**

LGAD

Tuesday 21 February 2017 11:50 (25 minutes)

Summary

Presenter: FORSTER, Fabian Alexander (IFAE Barcelona (ES))

Session Classification: Precise timing workshop

Contribution ID: **110**

Type: **not specified**

CsI and gaseous detectors

Tuesday 21 February 2017 14:00 (25 minutes)

Summary

Presenters: TESSAROTTO, Fulvio (Universita e INFN, Trieste (IT)); DALLA TORRE, Silvia (Universita e INFN, Trieste (IT))

Session Classification: Precise timing workshop

Contribution ID: **111**

Type: **not specified**

New Directions on Robust Photocathodes

Tuesday 21 February 2017 14:25 (25 minutes)

Presenter: SMEDLEY, John (Brookhaven National Laboratory)

Session Classification: Precise timing workshop

Contribution ID: **112**

Type: **not specified**

MPGD Fast Electronics

Tuesday 21 February 2017 14:50 (25 minutes)

Presenter: MULLER, Hans

Session Classification: Precise timing workshop

Contribution ID: **113**

Type: **not specified**

Fast timing techniques

Tuesday 21 February 2017 15:15 (25 minutes)

Presenter: RIVETTI, Angelo (Universita e INFN Torino (IT))

Session Classification: Precise timing workshop

Contribution ID: **114**

Type: **not specified**

New Transimpedance Fast preamplifier used in PICOSEC for silicon

Tuesday 21 February 2017 16:25 (25 minutes)

Presenter: NEWCOMER, Mitchell Franck (University of Pennsylvania (US))

Session Classification: Precise timing workshop

Contribution ID: **115**

Type: **not specified**

News on “SuperNino”

Tuesday 21 February 2017 16:50 (25 minutes)

Presenter: WILLIAMS, Crispin (Universita e INFN, Bologna (IT))

Session Classification: Precise timing workshop

Contribution ID: **116**

Type: **not specified**

Status of development on the SAMPIC Waveform TDC

Tuesday 21 February 2017 17:15 (25 minutes)

Summary

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

Session Classification: Precise timing workshop

Contribution ID: **117**

Type: **not specified**

new TDC chip to accompany the PETIROC developed by OMEGA group

Tuesday 21 February 2017 17:40 (25 minutes)

Summary

Presenters: MATHEZ, Herve (Universite Claude Bernard-Lyon I (FR)); LAKTINEH, Imad (Universite Claude Bernard-Lyon I (FR))

Session Classification: Precise timing workshop

Contribution ID: 118

Type: **not specified**

Advantages of fast sampling for timing measurements

Wednesday 22 February 2017 09:00 (25 minutes)

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

Session Classification: Precise timing workshop

Contribution ID: 120

Type: **not specified**

Time resolution of a MCP-PMT and test infrastructure in the solid state detector lab

Wednesday 22 February 2017 09:25 (25 minutes)

Presenter: CENTIS VIGNALI, Matteo (Hamburg University (DE))

Session Classification: Precise timing workshop

Contribution ID: **121**

Type: **not specified**

A Picosecond X-ray Source

Wednesday 22 February 2017 09:50 (25 minutes)

Presenter: RESNATI, Filippo (CERN)

Session Classification: Precise timing workshop

Contribution ID: **122**

Type: **not specified**

“Tynodes”

Wednesday 22 February 2017 10:35 (30 minutes)

Summary

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

Session Classification: Precise timing workshop

Contribution ID: 123

Type: **not specified**

Progress report on the analysis of PICOSECOND-MICROMEGAS test beam and calibration data: techniques and studies

Tuesday 21 February 2017 09:45 (30 minutes)

Summary

Presenter: TZAMARIAS, Spyros (Aristotle University of Thessaloníki (GR))

Session Classification: Precise timing workshop

Contribution ID: **124**

Type: **not specified**

Gas detector modelling for fast timing detectors

Wednesday 22 February 2017 11:30 (25 minutes)

Presenter: GONZALEZ DIAZ, Diego (Uludag University (TR))

Session Classification: Precise timing workshop

Contribution ID: 125

Type: **not specified**

Electrical stability of THGEMs and MICROMEAS in the COMPASS experimental environment

Thursday 23 February 2017 09:40 (20 minutes)

Presenter: DALLA TORRE, Silvia (Universita e INFN, Trieste (IT))

Session Classification: WG1 - New Structures and Technologies

Contribution ID: 126

Type: **not specified**

A new prototype for the fast timing mpd (FTM) and the development of fast readout electronics (FATIC)

Wednesday 22 February 2017 11:05 (25 minutes)

Presenters: RANIERI, Antonio (Universita e INFN, Bari (IT)); VERWILLIGEN, Piet (Universita e INFN, Bari (IT))

Session Classification: Precise timing workshop

Contribution ID: 127

Type: **not specified**

Ion mobility in Xe-CO₂ mixtures: recent results

Wednesday 22 February 2017 14:25 (25 minutes)

Summary

Presenters: CORTEZ, André (LIP-Coimbra); PERDIGOTO, José Manuel (LIP-Coimbra)

Session Classification: WG4 - Modelling of Physics Processes and Software Tools

Contribution ID: **129**

Type: **not specified**

GEM production status at TECHTRA

Wednesday 22 February 2017 16:00 (20 minutes)

Presenter: BIELOWKA, Piotr (TTA Techtra)

Session Classification: WG6 - Production and Industrialization

Contribution ID: **130**

Type: **not specified**

Non-flammable gases in TREX-DM

Wednesday 22 February 2017 14:00 (25 minutes)

Presenter: IGUAZ GUTIERREZ, Francisco Jose (Universidad de Zaragoza (ES))

Session Classification: WG4 - Modelling of Physics Processes and Software Tools

Contribution ID: **131**

Type: **not specified**

Field distortions at the edges of the Alice TPC IROCs

Wednesday 22 February 2017 14:50 (25 minutes)

Presenter: HELLBÄR, Ernst (Johann-Wolfgang-Goethe Univ. (DE))

Session Classification: WG4 - Modelling of Physics Processes and Software Tools

Contribution ID: **132**

Type: **not specified**

Impact of initial electron momentum on a reconstructed beam profile

Wednesday 22 February 2017 15:15 (25 minutes)

Presenter: BELLONI, Francesca (CEA)

Session Classification: WG4 - Modelling of Physics Processes and Software Tools

Contribution ID: 133

Type: **not specified**

GEM production status at MICROPACK

Wednesday 22 February 2017 16:20 (20 minutes)

Summary

Presenter: Mr MENON, Pradeep (Micropack)

Session Classification: WG6 - Production and Industrialization

Contribution ID: 134

Type: **not specified**

GEM production in Korea

Wednesday 22 February 2017 16:40 (20 minutes)

Presenter: DE OLIVEIRA, Rui (CERN)

Session Classification: WG6 - Production and Industrialization

Contribution ID: 135

Type: **not specified**

Introduction and statement on SRS

Monday 20 February 2017 15:00 (5 minutes)

Presenter: MULLER, Hans

Session Classification: WG5 - Electronics for MPGDs

Contribution ID: **136**

Type: **not specified**

Status of VMM3

Monday 20 February 2017 15:05 (20 minutes)

Presenter: IAKOVIDIS, George (Brookhaven National Laboratory (US))

Session Classification: WG5 - Electronics for MPGDs

Contribution ID: **137**

Type: **not specified**

ESS activities with VMM SRS

Monday 20 February 2017 15:25 (20 minutes)

Presenter: LUPBERGER, Michael (CERN)

Session Classification: WG5 - Electronics for MPGDs

Contribution ID: **138**

Type: **not specified**

RCDAQ Online system for SRS

Monday 20 February 2017 15:45 (30 minutes)

Presenter: PURSCHKE, Martin Lothar (Brookhaven National Laboratory (US))

Session Classification: WG5 - Electronics for MPGDs

Contribution ID: **139**

Type: **not specified**

Transient study in various RPWELL prototypes

Thursday 23 February 2017 11:40 (20 minutes)

Presenters: SHAKED, Dan (Weizmann Institute of Science (IL)); BRESSLER, Shikma (Weizmann Institute of Science (IL))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: **140**

Type: **not specified**

Latest measurement on gating GEMs

Thursday 23 February 2017 10:00 (20 minutes)

Summary

Presenter: THUINER, Patrik (CERN)

Session Classification: WG1 - New Structures and Technologies

Contribution ID: **141**

Type: **not specified**

RD51 Precise Timing Workshop Closeout

Wednesday 22 February 2017 11:55 (15 minutes)

Presenter: ROPELEWSKI, Leszek (CERN)

Session Classification: Precise timing workshop

Contribution ID: **142**

Type: **not specified**

ATLAS NSW Micromegas production update

Wednesday 22 February 2017 17:00 (20 minutes)

Presenter: IENGO, Paolo (CERN)

Session Classification: WG6 - Production and Industrialization