

RD51 Collaboration Meeting and Topical Workshop on Wide Dynamic Range Operation

Report of Contributions

Contribution ID: **147**

Type: **not specified**

MPGDs operation in high-dynamic range environments

Thursday 18 November 2021 09:05 (30 minutes)

Summary

Presenter: PESKOV, Vladimir (Russian Academy of Sciences (RU))

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **148**

Type: **not specified**

Single photon detection with gaseous detectors and the COMPASS RICH experience

Thursday 18 November 2021 09:35 (25 minutes)

Presenter: CHATTERJEE, Chandradoy (INFN Trieste (IT))

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **149**

Type: **not specified**

Detector Dynamic Range and the Migdal Effect

Thursday 18 November 2021 16:40 (25 minutes)

Presenter: MILLS, Alex (University of New Mexico)

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **150**

Type: **not specified**

Super-FRS tracking of heavy ions at FAIR with twin-GEM-TPC

Thursday 18 November 2021 15:10 (25 minutes)

Summary

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

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **151**

Type: **not specified**

Recent Developments in Optical and Charge Hybrid Readout Glass GEM

Thursday 18 November 2021 11:10 (25 minutes)

Presenter: FUJIWARA, Takeshi (National Institute of Advanced Industrial Science & Technology
)

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **152**

Type: **not specified**

Operation and performance of MPGD in Active Target Time Projection Chambers

Thursday 18 November 2021 16:15 (25 minutes)

Summary

Presenter: AYYAD, Yassid (Facility for rare Isotope Beams)

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **153**

Type: **not specified**

Dynamic range in MPGD-based directional neutron and dark matter detection

Thursday 18 November 2021 17:05 (25 minutes)

Presenter: VAHSEN, Sven (University of Hawaii (US))

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **154**

Type: **not specified**

tbd

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: 155

Type: **not specified**

Effects of high charge densities in GEM-based detectors

Thursday 18 November 2021 15:35 (25 minutes)

Presenter: RESNATI, Filippo (CERN)

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **156**

Type: **not specified**

Measurements and simulation of the response linearity of a Triple GEM structure

Thursday 18 November 2021 10:00 (25 minutes)

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

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **157**

Type: **not specified**

An Approach for Extra large high Dynamic Range

Thursday 18 November 2021 12:00 (25 minutes)

Presenter: POLLACCO, Emanuel (CEA)

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: 158

Type: **not specified**

Possible ways to increase dynamic range in GEM, THGEM, Micromegas and uRwell detectors

Thursday 18 November 2021 10:25 (25 minutes)

Summary

Presenter: DE OLIVEIRA, Rui (CERN)

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **159**

Type: **not specified**

A first look at electronic spark mitigation for wide dynamic range operation

Thursday 18 November 2021 14:20 (25 minutes)

Summary

Presenter: BORG, Johan Erik (Imperial College (GB))

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **160**

Type: **not specified**

Discharge quenching - towards a spark-less MPGD

Thursday 18 November 2021 11:35 (25 minutes)

Summary

Presenter: GASIK, Piotr (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **161**

Type: **not specified**

tbd

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **162**

Type: **not specified**

Discussion

Thursday 18 November 2021 17:30 (10 minutes)

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **163**

Type: **not specified**

Opening

Thursday 18 November 2021 09:00 (5 minutes)

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs

Contribution ID: **164**

Type: **not specified**

Fast grounding simulation for DLC-based uRWELL detector

Wednesday 17 November 2021 09:00 (30 minutes)

Presenters: ZHOU, Yi (USTC); ZHOU, Yi (University of Science and Technology of China (CN)); FANG, Zhujun (USTC)

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

Contribution ID: **165**

Type: **not specified**

Simulation of Negative Ions in Garfield++

Wednesday 17 November 2021 09:30 (30 minutes)

Summary

Presenter: ISHIURA, Hirohisa (Kobe University(JP))

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

Contribution ID: **166**

Type: **not specified**

Performance of a resistive Micromegas in a controlled O₂ environment

Wednesday 17 November 2021 10:00 (30 minutes)

Summary

Presenter: BHATTACHARYA, Deb Sankar (Julius Max. Universitaet Wuerzburg (DE))

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

Contribution ID: **167**

Type: **not specified**

Penning Transfers: Available Data and Garfield++ Implementation

Wednesday 17 November 2021 10:45 (20 minutes)

Summary

Presenter: ALSAMAK, Ibrahim A.M. (Bursa Uludag University)

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

Contribution ID: **168**

Type: **not specified**

Determination of cluster ion size for Ar-CO₂ mixtures.

Wednesday 17 November 2021 11:05 (20 minutes)

Summary

Presenter: KALKAN, Yalcin (Muş Alparslan University (TR))

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

Contribution ID: **169**

Type: **not specified**

Performance of the microbulk detector in the IAXO pathfinder system at the CAST experiment

Tuesday 16 November 2021 15:00 (20 minutes)

Presenter: MARGALEJO BLASCO, Cristina (Universidad de Zaragoza (ES))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: 170

Type: **not specified**

Update of the 100cmX50cm RWELL detector for DHCAL application

Tuesday 16 November 2021 09:00 (25 minutes)

Presenters: HONG, Daojin (USTC); ZHOU, Yi (USTC); ZHOU, Yi (University of Science and Technology of China (CN))

Session Classification: WG1 - Technological Aspects and Development of New Detector Structures

Contribution ID: 171

Type: **not specified**

Study of the thermal bonding Micromegas in 10 bar gas pressure for PandaX-III experiment

Tuesday 16 November 2021 09:25 (25 minutes)

Presenters: WEN, Sicheng (USTC); ZHOU, Yi (USTC); ZHOU, Yi (University of Science and Technology of China (CN))

Session Classification: WG1 - Technological Aspects and Development of New Detector Structures

Contribution ID: 172

Type: **not specified**

Spherical Proportional Counter: Towards a spherical gaseous TPC with charge and light readouts

Tuesday 16 November 2021 09:50 (25 minutes)

Summary

Presenters: KATSIIOULAS, Ioannis (University of Birmingham); KATSIIOULAS, Ioannis (University of Birmingham)

Session Classification: WG1 - Technological Aspects and Development of New Detector Structures

Contribution ID: 173

Type: **not specified**

Ion Back Flow measurements in hybrid GEM and Micromegas detectors

Tuesday 16 November 2021 16:40 (20 minutes)

Presenter: GLAENZER, Aude (Université Paris-Saclay (FR))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: 174

Type: **not specified**

Overview of the EIC R&D effort on MPGDs

Tuesday 16 November 2021 10:50 (25 minutes)

Presenters: BOSSU, Francesco (Université Paris-Saclay (FR)); BOSSU, Francesco (CEA-Saclay)

Session Classification: WG1 - Technological Aspects and Development of New Detector Structures

Contribution ID: 175

Type: **not specified**

Characterization of the random electrode sectorization in the GEM-foils

Tuesday 16 November 2021 10:15 (25 minutes)

Presenter: FALLAVOLLITA, Francesco (CERN)

Session Classification: WG1 - Technological Aspects and Development of New Detector Structures

Contribution ID: 176

Type: **not specified**

Preliminary results of Micro-strip gas counter on PCB substrate

Wednesday 17 November 2021 15:00 (25 minutes)

Presenter: WANG, Xu (University of Science and Technology of China (CN))

Session Classification: WG6 - Production and Industrialization

Contribution ID: 177

Type: **not specified**

Capacitive-sharing with uRWELL and GEMs

Wednesday 17 November 2021 15:25 (25 minutes)

Presenter: GNANVO, Kondo (University of Virginia (US))

Session Classification: WG6 - Production and Industrialization

Contribution ID: **178**

Type: **not specified**

Charging-up studies on triple GEM chambers

Presenter: CHATTERJEE, Sayak

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: 179

Type: **not specified**

First results in signal sharing with multi-pad Picosec module prototypes

Tuesday 16 November 2021 15:40 (20 minutes)

Summary

Presenter: KALLITSOPOULOU, Alexandra (Aristotle University of Thessaloniki (GR))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: **180**

Type: **not specified**

Characterization of micro-RWELL with high intensity X-rays

Tuesday 16 November 2021 16:00 (20 minutes)

Summary

Presenter: GIOVANNETTI, Matteo (INFN e Laboratori Nazionali di Frascati (IT))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: **181**

Type: **not specified**

Triple GEM characterisation and performance studies

Tuesday 16 November 2021 17:00 (20 minutes)

Presenter: KUMAR, Ajit (Variable Energy Cyclotron Centre)

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: **182**

Type: **not specified**

Report on the GE21 mass production for the upgrade of the CMS muon system

Wednesday 17 November 2021 15:50 (25 minutes)

Presenter: MERLIN, Jeremie Alexandre (INFN-Bari)

Session Classification: WG6 - Production and Industrialization

Contribution ID: **183**

Type: **not specified**

Characterizing Microbulk Micromegas detectors through digital image processing

Wednesday 17 November 2021 16:15 (25 minutes)

Presenter: BIASUZZI, Barbara (CEA - IRFU)

Session Classification: WG6 - Production and Industrialization

Contribution ID: **184**

Type: **not specified**

The Surface Resistive Plate Counter: preliminary results of the test beam

Tuesday 16 November 2021 11:15 (25 minutes)

Presenter: BENCIVENNI, Giovanni (INFN e Laboratori Nazionali di Frascati (IT))

Session Classification: WG1 - Technological Aspects and Development of New Detector Structures

Contribution ID: **185**

Type: **not specified**

The Multi-layer THGEM and derived structures

Tuesday 16 November 2021 12:05 (25 minutes)

Presenter: CORTESI, Marco (Michigan State University)

Session Classification: WG1 - Technological Aspects and Development of New Detector Structures

Contribution ID: **186**

Type: **not specified**

Charging-up studies on triple GEM chamber

Tuesday 16 November 2021 17:20 (20 minutes)

Summary

Presenter: CHATTERJEE, Sayak

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: **187**

Type: **not specified**

Production of Large Modules for the Atlas NSW at Saclay

Presenter: JEANNEAU, Fabien (Université Paris-Saclay (FR))

Session Classification: WG6 - Production and Industrialization

Contribution ID: **188**

Type: **not specified**

Progress with small-pad Micromegas

Tuesday 16 November 2021 15:20 (20 minutes)

Summary

Presenter: SESSA, Marco (Universita e INFN Roma Tre (IT))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: **189**

Type: **not specified**

Picosec precise timing detectors : recent results, status and plans

Tuesday 16 November 2021 11:40 (25 minutes)

Presenter: UTROBICIC, Antonija (CERN)

Session Classification: WG1 - Technological Aspects and Development of New Detector Structures

Contribution ID: **190**

Type: **not specified**

109 Plenary ECFA Meeting - <https://indico.cern.ch/event/1085137>

Friday 19 November 2021 09:00 (1h 30m)

<https://indico.cern.ch/event/1085137/>

- Accelerator R&D Raodmap, Dave Newbold (STFC Rutherford Appleton Laboratory (GB))
- Detector R&D Roadmap, Philip Patrick Allport (University of Birmingham (UK))
- Computing - challenges and future directions, Simone Campana (CERN)

Summary

Session Classification: Communications

Contribution ID: **191**

Type: **not specified**

intro and news

Friday 19 November 2021 10:30 (5 minutes)

Summary

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

Session Classification: WG7 - Common Test Facilities

Contribution ID: **192**

Type: **not specified**

PICOSEC

Friday 19 November 2021 10:35 (15 minutes)

Presenter: LISOWSKA, Marta (Ecole Normale Supérieure Paris-Saclay (FR))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **193**

Type: **not specified**

MINICACTUS

Friday 19 November 2021 10:50 (15 minutes)

Presenter: DEGERLI, Yavuz (CEA - Centre d'Etudes de Saclay (FR))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **194**

Type: **not specified**

UNIANDES/GSI GEM Traker & SRS/VMM3a

Friday 19 November 2021 11:05 (15 minutes)

Summary

Presenters: ROQUE, Gerardo (Universidad de los Andes (CO)); BELIAS, Anastasios (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE)); DEMICHEV, Mikhail (Joint Institute for Nuclear Research (RU))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **195**

Type: **not specified**

DUBNA Straw

Friday 19 November 2021 11:20 (15 minutes)

Summary

Presenter: BAUTIN, Vitalii (Joint Institute for Nuclear Research (RU))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **196**

Type: **not specified**

RD51 Triple GEM Tracker & SRS/VMM3a

Friday 19 November 2021 11:35 (15 minutes)

Presenter: SCHARENBERG, Lucian (CERN, University of Bonn (DE))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **197**

Type: **not specified**

LMU GEM/mm

Friday 19 November 2021 11:50 (15 minutes)

Presenters: JAGFELD, Christoph (Ludwig Maximilians Universitat (DE)); JAGFELD, Christoph (Ludwig Maximilians Universitat (DE))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **198**

Type: **not specified**

Small Pad Resistive mm

Friday 19 November 2021 12:05 (15 minutes)

Summary

Presenter: SESSA, Marco (Universita e INFN Roma Tre (IT))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **199**

Type: **not specified**

LMU PCT

Friday 19 November 2021 12:20 (15 minutes)

Summary

Presenters: BORTFELDT, Jona (Ludwig Maximilians Universitat (DE)); BORTFELDT, Jonathan Frederik (Fakultaet fuer Physik-Ludwig-Maximilians-Univ. Muenchen)

Session Classification: WG7 - Common Test Facilities

Contribution ID: **200**

Type: **not specified**

RPWELL

Friday 19 November 2021 14:00 (15 minutes)

Summary

Presenter: ZAVAZIEVA, Darina

Session Classification: WG7 - Common Test Facilities

Contribution ID: **201**

Type: **not specified**

CMS GEM Phase-II & FTM

Friday 19 November 2021 14:15 (15 minutes)

Summary

Presenter: PELLECCCHIA, Antonello (Universita e INFN, Bari (IT))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **202**

Type: **not specified**

AMBER mm/TIGER

Friday 19 November 2021 14:30 (15 minutes)

Summary

Presenter: ALICE, Chiara (Universita e INFN Torino (IT))

Session Classification: WG7 - Common Test Facilities

Contribution ID: **203**

Type: **not specified**

uRWELL (H8)

Friday 19 November 2021 14:45 (15 minutes)

Presenters: GIOVANNETTI, Matteo (INFN e Laboratori Nazionali di Frascati (IT)); TBC

Session Classification: WG7 - Common Test Facilities

Contribution ID: **204**

Type: **not specified**

Performance of a resistive Micromegas in a controlled O₂ environment

Presenter: BHATTACHARYA, Deb Sankar (Julius Max. Universitaet Wuerzburg (DE))

Session Classification: WG2 - Detector Physics and Performance

Contribution ID: **205**

Type: **not specified**

Welcome and Intro

Monday 15 November 2021 14:00 (5 minutes)

Presenters: MULLER, Hans (University of Bonn (DE)); KAMINSKI, Jochen (University of Bonn (DE))

Session Classification: WG5 - Electronics for MPGD

Contribution ID: **206**

Type: **not specified**

ASIC table

Monday 15 November 2021 14:05 (5 minutes)

Presenter: BREGANT, Marco (Universidade de Sao Paulo (BR))

Session Classification: WG5 - Electronics for MPGD

Contribution ID: **207**

Type: **not specified**

SAMPA and SRS

Monday 15 November 2021 14:10 (20 minutes)

Summary

Presenter: NATAL DA LUZ, Hugo (Czech Technical University in Prague)

Session Classification: WG5 - Electronics for MPGD

Contribution ID: **208**

Type: **not specified**

SRS/VMM3a HW/FW/SW update

Monday 15 November 2021 14:30 (20 minutes)

Presenter: PFEIFFER, Dorothea (CERN)

Session Classification: WG5 - Electronics for MPGD

Contribution ID: 209

Type: **not specified**

SRS VMM3a-based streaming readout for future GEM detectors at AMBER and in neutron science

Monday 15 November 2021 14:50 (20 minutes)

Presenters: LUPBERGER, Michael (University of Bonn (DE)); LUPBERGER, Michael (University of Bonn)

Session Classification: WG5 - Electronics for MPGD

Contribution ID: **210**

Type: **not specified**

SRS/VMM3a - RD51 testbeams

Monday 15 November 2021 15:10 (15 minutes)

Presenter: OLIVERI, Eraldo (CERN)

Session Classification: WG5 - Electronics for MPGD

Contribution ID: **211**

Type: **not specified**

SRS/VMM3a - Documentation and software-operation overview

Monday 15 November 2021 15:40 (15 minutes)

Presenter: SCHARENBERG, Lucian (CERN, University of Bonn (DE))

Session Classification: WG5 - Electronics for MPGD

Contribution ID: **212**

Type: **not specified**

Discussion

Monday 15 November 2021 15:55 (5 minutes)

Session Classification: WG5 - Electronics for MPGD

Contribution ID: 213

Type: **not specified**

The High Voltage power supply system for MPGDs. Status and plans

Monday 15 November 2021 16:20 (20 minutes)

Presenter: GARCÍA ORDÓÑEZ, Luis G. (ICTP-MLAB/INFN Sezione di Trieste (IT))

Session Classification: WG5 - Electronics for MPGD

Contribution ID: **214**

Type: **not specified**

Optocoupler based biasing scheme for triple GEM of CBM-MuCh

Monday 15 November 2021 16:40 (20 minutes)

Summary

Presenters: KUMAR, Ajit; KUMAR, Ajit (Variable Energy Cyclotron Centre)

Session Classification: WG5 - Electronics for MPGD

Contribution ID: 215

Type: **not specified**

Usage potential of Cellulosic thick films for the GEM sheets

Presenter: KALKAN, Yalcin (Muş Alparslan University (TR))

Session Classification: WG6 - Production and Industrialization

Contribution ID: **216**

Type: **not specified**

Lessons from test beam, CTF clock and grounding

Monday 15 November 2021 15:25 (15 minutes)

Presenter: MULLER, Hans (University of Bonn (DE))

Session Classification: WG5 - Electronics for MPGD

Contribution ID: **217**

Type: **not specified**

An update to the modelling of signal formation in detectors with resistive elements

Wednesday 17 November 2021 11:25 (15 minutes)

Summary

Presenter: JANSSENS, Djunes (Vrije Universiteit Brussel (BE))

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

Contribution ID: **218**

Type: **not specified**

tbd

Presenters: GNANVO, Kondo (Florida Institute of Technology, Melbourne, FL, USA); GNANVO, Kondo (University of Virginia (US))

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

Contribution ID: **219**

Type: **not specified**

RD51 membership application - Jefferson Lab

Wednesday 17 November 2021 12:00 (20 minutes)

Presenter: GNANVO, Kondo (University of Virginia (US))

Session Classification: Communications

Contribution ID: **221**

Type: **not specified**

Spherical gaseous detectors for wide dynamic range

Thursday 18 November 2021 14:45 (25 minutes)

Presenter: KNIGHTS, Patrick Ryan (University of Birmingham (GB))

Session Classification: Topical Workshop - Wide Dynamic Range Operation of MPGDs