

# **RD51 Mini-Week**

## **Report of Contributions**

Contribution ID: **193**

Type: **not specified**

## **Current state of the art of DLC detectors in various users groups**

*Wednesday, 12 February 2020 14:00 (1 hour)*

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

**Session Classification:** WG6 - Production and Industrialization

Contribution ID: **194**

Type: **not specified**

## **DLC community contributions from RD51 common project**

*Wednesday, 12 February 2020 15:00 (30 minutes)*

**Presenter:** ZHOU, Yi (University of Science and Technology of China (CN))

**Session Classification:** WG6 - Production and Industrialization

Contribution ID: 195

Type: **not specified**

## **Production processes and problems on Resistive MPGD**

*Wednesday, 12 February 2020 16:00 (30 minutes)*

**Presenter:** DE OLIVEIRA, Rui (CERN)

**Session Classification:** WG6 - Production and Industrialization

Contribution ID: 196

Type: **not specified**

## **Current DLC production centers - Intro**

*Thursday, 13 February 2020 09:00 (10 minutes)*

**Presenters:** BENCIVENNI, Giovanni (Istituto Nazionale Fisica Nucleare Frascati (IT)); DE OLIVEIRA, Rui (CERN)

**Session Classification:** Workshop on DLC

Contribution ID: **197**

Type: **not specified**

## **DLC deposition machine details**

*Thursday, 13 February 2020 11:00 (30 minutes)*

**Presenter:** FERRY, Serge (CERN)

**Session Classification:** Workshop on DLC

Contribution ID: 198

Type: **not specified**

## **Discussion on the possibilities of expanding the current production status**

*Thursday, 13 February 2020 11:30 (1 hour)*

**Presenters:** OCHI, Atsuhiko (Kobe University (JP)); BENCIVENNI, Giovanni (Istituto Nazionale Fisica Nucleare Frascati (IT)); DE OLIVEIRA, Rui (CERN); ZHOU, Yi (University of Science and Technology of China (CN))

**Session Classification:** Workshop on DLC

Contribution ID: **199**

Type: **not specified**

## **lunch**

**Session Classification:** Workshop on DLC



Contribution ID: **200**

Type: **not specified**

## **Detailed discussion with groups directly interested with DLC technologies**

**Presenters:** OCHI, Atsuhiko (Kobe University (JP)); BENCIVENNI, Giovanni (Istituto Nazionale Fisica Nucleare Frascati (IT)); DE OLIVEIRA, Rui (CERN); ZHOU, Yi (University of Science and Technology of China (CN))

**Session Classification:** Workshop on DLC

Contribution ID: 201

Type: **not specified**

## **High sensitivity detectors of smoke/flames and dangerous gases- preliminary results**

*Tuesday, 11 February 2020 14:40 (20 minutes)*

**Presenters:** PIETROPAOLO, Francesco (CERN); PESKOV, Vladimir (Russian Academy of Sciences (RU))

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

Contribution ID: **202**

Type: **not specified**

## **Timepix 4 design parameters**

*Tuesday, 11 February 2020 15:00 (20 minutes)*

**Presenter:** LLOPART CUDIE, Xavi (CERN)

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

Contribution ID: 203

Type: **not specified**

## Calculations for resistive layers in MPGDs

*Wednesday, 12 February 2020 09:30 (30 minutes)*

**Presenter:** RIEGLER, Werner (CERN)

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

Contribution ID: 204

Type: **not specified**

## Simulation of triple GEMs with a movie

*Wednesday, 12 February 2020 10:20 (20 minutes)*

### Summary

**Presenters:** DUBEY, Anand Kumar (Department of Atomic Energy (IN)); BAL, Aritra (Indian Institute of Technology, Kharagpur, India)

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

Contribution ID: 205

Type: **not specified**

## **Overview on recent PICOSEC-Micromegas developments and performance tests**

*Tuesday, 11 February 2020 09:00 (20 minutes)*

### **Summary**

**Presenter:** SOHL, Lukas (Université Paris-Saclay (FR))

**Session Classification:** WG2 - Detector Physics and Performance

Contribution ID: 206

Type: **not specified**

## **Update on Small-Pad Micromegas - rate capability as a function of irradiated area**

*Tuesday, 11 February 2020 09:20 (20 minutes)*

**Presenter:** CAMERLINGO, Maria Teresa (Universita e INFN Roma Tre (IT))

**Session Classification:** WG2 - Detector Physics and Performance

Contribution ID: 207

Type: **not specified**

## 2D-THCOBRA: New findings through optical readout

*Tuesday, 11 February 2020 11:10 (30 minutes)*

### Summary

**Primary authors:** MONTEIRO DA SILVA, Ana Luisa (University of Aveiro (PT)); BRUNBAUER, Florian Maximilian (CERN, Vienna University of Technology (AT)); GARCIA FUENTES, Francisco Ignacio (Helsinki Institute of Physics (FI)); LISOWSKA, Marta (Wroclaw University of Science and Technology (PL)); VELOSO, joao (university of aveiro)

**Presenters:** MONTEIRO DA SILVA, Ana Luisa (University of Aveiro (PT)); BRUNBAUER, Florian Maximilian (CERN, Vienna University of Technology (AT))

**Session Classification:** WG2 - Detector Physics and Performance



Contribution ID: **208**

Type: **not specified**

## **ASSET - Photocathode characterisation device**

*Wednesday, 12 February 2020 11:30 (15 minutes)*

### **Summary**

**Presenter:** LISOWSKA, Marta (Wroclaw University of Science and Technology (PL))

**Session Classification:** WG2 - Detector Physics and Performance

Contribution ID: 209

Type: **not specified**

## **Preliminary results of ND Photocathode coupled to THGEMs**

*Wednesday, 12 February 2020 11:45 (15 minutes)*

### **Summary**

**Presenters:** TRILOKI, Triloki (Universita e INFN Trieste (IT)); DASGUPTA, Shuddha Shankar (INFN Trieste (IT))

**Session Classification:** WG2 - Detector Physics and Performance

Contribution ID: 210

Type: **not specified**

## **Observation of the Migdal effect from nuclear scattering using a low pressure Optical-TPC**

*Tuesday, 11 February 2020 14:20 (20 minutes)*

**Presenter:** Dr MAJEWSKI, Pawel (STFC/Rutherford Appleton Laboratory)

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

Contribution ID: 211

Type: **not specified**

## **Production and Test of an Aluminum Floating Strip Micromegas for Small Animal Proton Imaging**

*Tuesday, 11 February 2020 14:00 (20 minutes)*

**Presenter:** BORTFELDT, Jonathan Frederik (Fakultaet fuer Physik-Ludwig-Maximilians-Univ. Muenchen)

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

Contribution ID: 212

Type: **not specified**

## **Update on ATLAS NSW Micromegas - Understanding of the HV Stability issues**

*Tuesday, 11 February 2020 16:10 (40 minutes)*

**Presenter:** ANULLI, Fabio (Sapienza Universita e INFN, Roma I (IT))

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

Contribution ID: 213

Type: **not specified**

## **Charge spreading in the upgraded TPCs of T2K/ND280**

*Tuesday, 11 February 2020 15:50 (20 minutes)*

**Presenter:** LEHURAUX, Marion (Université Paris-Saclay (FR))

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

Contribution ID: 214

Type: **not specified**

## Diamond film (RD in Bari)

*Wednesday, 12 February 2020 11:00 (30 minutes)*

After a brief introduction on some properties of CsI-based photocathodes, the results on diamond-based will be reviewed, starting from films obtained by CVD to get to those by Powder Spray.

**Presenters:** VALENTINI, Antonio (INFN - National Institute for Nuclear Physics); VALENTINI, Antonio (INFN Bari)

**Session Classification:** WG2 - Detector Physics and Performance

Contribution ID: 215

Type: **not specified**

## **Testing large size triple GEM chambers in mCBM experiment at SIS18 facility of GSI**

*Tuesday, 11 February 2020 10:00 (20 minutes)*

**Presenters:** KUMAR, Ajit (Variable Energy Cyclotron Centre); DUBEY, Anand Kumar (Department of Atomic Energy (IN))

**Session Classification:** WG2 - Detector Physics and Performance



Contribution ID: 216

Type: **not specified**

## Progress with the VMM frontend at Mainz (vidyo)

*Monday, 10 February 2020 16:40 (20 minutes)*

**Presenters:** CAIAZZA, Stefano (Johannes Gutenberg Universitaet Mainz (DE)); CAIAZZA, Stefano (University of Bologna - INFN Bologna); CAIAZZA, Stefano (JGU - University of Mainz - KPH institute); CAIAZZA, Stefano (JGU Mainz)

**Session Classification:** WG5 - Electronics for MPGD

Contribution ID: 217

Type: **not specified**

## Status of the WG5.1 Working group discussions

*Monday, 10 February 2020 14:20 (20 minutes)*

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

**Session Classification:** WG5 - Electronics for MPGD

Contribution ID: **218**

Type: **not specified**

## **Integration of the SAMPA in the SRS frontend (vidyo)**

*Monday, 10 February 2020 14:00 (20 minutes)*

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

**Session Classification:** WG5 - Electronics for MPGD

Contribution ID: **219**

Type: **not specified**

## **VMM high rate measurements**

*Monday, 10 February 2020 14:40 (20 minutes)*

**Presenters:** PFEIFFER, Dorothea (CERN); SCHARENBERG, Lucian (CERN, University of Bonn (DE))

**Session Classification:** WG5 - Electronics for MPGD

Contribution ID: **220**

Type: **not specified**

## **Firmware for the VMM hybrid frontend**

*Monday, 10 February 2020 15:00 (20 minutes)*

**Presenter:** HRACEK, Marek (Czech Technical University (CZ))

**Session Classification:** WG5 - Electronics for MPGD

Contribution ID: 221

Type: **not specified**

## **VMM hybrid test Software for uPython-driven test card**

*Monday, 10 February 2020 16:20 (20 minutes)*

**Presenters:** POPESCU, Sorina (The University of Kansas (US)); POPESCU, Sorina (F)

**Session Classification:** WG5 - Electronics for MPGD

Contribution ID: 222

Type: **not specified**

## Connecting VMM frontends to the SRS backend

*Monday, 10 February 2020 17:00 (20 minutes)*

**Presenter:** MULLER, Hans

**Session Classification:** WG5 - Electronics for MPGD

Contribution ID: 223

Type: **not specified**

## Automated Quality Tests of the VMM-Hybrid

*Monday, 10 February 2020 16:00 (20 minutes)*

**Presenter:** JÄCKEL, Finn

**Session Classification:** WG5 - Electronics for MPGD



Contribution ID: 224

Type: **not specified**

## **Scalable Readout System: Updates of the VMM Hybrid firmware (vidyo)**

*Monday, 10 February 2020 15:20 (20 minutes)*

**Presenter:** SCHWÄBIG, Patrick

**Session Classification:** WG5 - Electronics for MPGD

Contribution ID: 225

Type: **not specified**

## Recent development of Glass GEM

*Tuesday, 11 February 2020 10:50 (20 minutes)*

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

**Session Classification:** WG2 - Detector Physics and Performance

Contribution ID: 226

Type: **not specified**

## Small Drift TPC with VMM Readout for MAGIX

*Tuesday, 11 February 2020 09:40 (20 minutes)*

### Summary

**Presenters:** GULKER, Jakob (Johannes Gutenberg Universitaet Mainz (DE)); GUELKER, pepe

**Session Classification:** WG2 - Detector Physics and Performance

Contribution ID: 227

Type: **not specified**

## **New Laser setup in Bari for MPGD gain measurements**

*Tuesday, 11 February 2020 11:40 (20 minutes)*

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

**Session Classification:** WG2 - Detector Physics and Performance

Contribution ID: 228

Type: **not specified**

## Santiago de Compostela

*Wednesday, 12 February 2020 09:15 (15 minutes)*

**Presenter:** GONZALEZ DIAZ, Diego (Universidade de Santiago de Compostela (ES))

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

Contribution ID: **229**

Type: **not specified**

## **Current DLC production centers - China**

*Thursday, 13 February 2020 09:10 (20 minutes)*

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

**Session Classification:** Workshop on DLC

Contribution ID: **230**

Type: **not specified**

## **Current DLC production centers - Japan**

*Thursday, 13 February 2020 09:30 (20 minutes)*

**Presenters:** OCHI, Atsuhiko (Kobe University (JP)); OCHI, Atsuhiko

**Session Classification:** Workshop on DLC

Contribution ID: 231

Type: **not specified**

## **Current DLC production centers - Italy**

*Thursday, 13 February 2020 09:50 (20 minutes)*

**Presenter:** VERWILLIGEN, Piet (Universita e INFN, Bari (IT))

**Session Classification:** Workshop on DLC



Contribution ID: 232

Type: **not specified**

## **Current DLC production centers - ESS-Linkoping laboratory**

*Thursday, 13 February 2020 10:10 (20 minutes)*

**Presenter:** LAI, Chung-Chuan (ESS-Linkoping laboratory)

**Session Classification:** Workshop on DLC

Contribution ID: 233

Type: **not specified**

## Current DLC production centers - Conclusion

*Thursday, 13 February 2020 10:30 (10 minutes)*

**Presenters:** BENCIVENNI, Giovanni (Istituto Nazionale Fisica Nucleare Frascati (IT)); DE OLIVEIRA, Rui (CERN)

**Session Classification:** Workshop on DLC