

**15th Topical Seminar on  
Innovative Particle and  
Radiation Detectors (IPRD19)**

**Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Poster session - Wine & Cheese

Contribution ID: 2

Type: **not specified**

## Welcome address

*Monday, October 14, 2019 9:00 AM (10 minutes)*

**Presenter:** NAVARRIA, Francesco (Universita e INFN, Bologna (IT))

**Session Classification:** IPRD19

Contribution ID: 3

Type: **not specified**

## **Optimisation of a silicon microstrip telescope for UA9 crystal channeling studies**

*Monday, October 14, 2019 9:10 AM (20 minutes)*

**Presenter:** HALL, Geoff (Imperial College (GB))

**Session Classification:** IPRD19

Contribution ID: 4

Type: **not specified**

## **Detectors for antideuteron search in cosmic rays: current status and new ideas**

*Monday, October 14, 2019 9:30 AM (20 minutes)*

**Presenter:** DIMICCOLI, Francesco (Universita degli Studi di Trento è INFN (IT))

**Session Classification:** IPRD19

Contribution ID: 5

Type: **not specified**

## **Tracking detector for high performance cosmic muon imaging**

*Monday, October 14, 2019 9:50 AM (20 minutes)*

**Presenter:** VARGA, Dezso (Hungarian Academy of Sciences (HU))

**Session Classification:** IPRD19

Contribution ID: 6

Type: **not specified**

## **50 ps timing with SiGe Bi-CMOS monolithic pixel sensors**

*Monday, October 14, 2019 10:10 AM (20 minutes)*

**Presenter:** IACOBUCCI, Giuseppe (Universite de Geneve (CH))

**Session Classification:** IPRD19

Contribution ID: 7

Type: **not specified**

## **A portable muon telescope based on small and gas-tight Resistive Plat Chambers**

*Monday, October 14, 2019 11:00 AM (15 minutes)*

**Presenter:** BASNET, Samip (Louvain)

**Session Classification:** IPRD19



Contribution ID: 8

Type: **not specified**

## **Monitoring the long-term stability of civil buildings through the MRPC telescopes of the EEE Project**

*Monday, October 14, 2019 11:15 AM (15 minutes)*

**Presenter:** PINTO, Chiara (INFN and University of Catania)

**Session Classification:** IPRD19

Contribution ID: 9

Type: **not specified**

## **Muon radiography applied to volcanoes imaging: the MURAVES experiment at Mt. Vesuvius**

*Monday, October 14, 2019 11:30 AM (15 minutes)*

**Presenter:** D'ERRICO, Mariaelena (Universita e INFN, Napoli (IT))

**Session Classification:** IPRD19

Contribution ID: **10**

Type: **not specified**

## **Development of Sealed MRPC with extremely low gas flow for muon tomography**

*Monday, October 14, 2019 11:45 AM (20 minutes)*

**Presenter:** CHEN, Xialong (Tsinghua University)

**Session Classification:** IPRD19

Contribution ID: 11

Type: **not specified**

## **Imaging by muons and their induced secondary particles –a novel technique**

*Monday, October 14, 2019 12:05 PM (20 minutes)*

**Presenter:** GALGOCZI, Gabor (Hungarian Academy of Sciences (HU))

**Session Classification:** IPRD19

Contribution ID: 12

Type: **not specified**

## **Multidisciplinary applications of muon radiography using the MIMA detector**

*Monday, October 14, 2019 12:25 PM (20 minutes)*

**Presenter:** BONECHI, Lorenzo (Istituto Nazionale di Fisica Nucleare (INFN))

**Session Classification:** IPRD19

Contribution ID: 13

Type: **not specified**

## **Positron Emission Tomography: alive and kicking after more than 65 years on stage**

*Monday, October 14, 2019 2:15 PM (25 minutes)*

**Presenter:** DEL GUERRA, alberto (University of Pisa)

**Session Classification:** IPRD19

Contribution ID: 14

Type: **not specified**

## **First characterization of a new Silicon Carbide detector for dosimetric applications**

*Monday, October 14, 2019 2:40 PM (20 minutes)*

**Presenter:** PETRINGA, Giada (LNS)

**Session Classification:** IPRD19

Contribution ID: 15

Type: **not specified**

## **Evaluation and Simulation of Breast Cancer Imaging Devices**

*Monday, October 14, 2019 3:00 PM (20 minutes)*

**Presenter:** UZUN OZSAHIN, Dilber

**Session Classification:** IPRD19



Contribution ID: 16

Type: **not specified**

## **Two asymmetric detectors define a novel MBI system for the breast cancer imaging**

*Monday, October 14, 2019 3:20 PM (20 minutes)*

**Presenter:** POMA, Gaetano Elio (INFN - National Institute for Nuclear Physics)

**Session Classification:** IPRD19

Contribution ID: 17

Type: **not specified**

## **Intercalibration and comparative tests of 3D diamond and diamond on iridium detectors for medical dosimetry**

*Monday, October 14, 2019 3:40 PM (20 minutes)*

**Presenter:** Dr KANXHERI, Keida (INFN - National Institute for Nuclear Physics)

**Session Classification:** IPRD19

Contribution ID: **18**

Type: **not specified**

## **Explore the lifetime frontier with MATHUSLA**

*Monday, October 14, 2019 4:30 PM (20 minutes)*

**Presenter:** ALPIGANI, Cristiano

**Session Classification:** IPRD19

Contribution ID: **19**

Type: **not specified**

## **On MAPS-On-Diamond sensors and their potential as innovative devices**

*Monday, October 14, 2019 4:50 PM (20 minutes)*

**Presenter:** SERVOLI, Leonello (Universita e INFN, Perugia (IT))

**Session Classification:** IPRD19

Contribution ID: 20

Type: **not specified**

## **Pixelated Resistive Bulk Micromegas for tracking systems in High Rate environment**

*Monday, October 14, 2019 5:10 PM (20 minutes)*

**Presenter:** ALVIGGI, Mariagrazia (Universita e sezione INFN di Napoli (IT))

**Session Classification:** IPRD19

Contribution ID: 21

Type: **not specified**

## **Modeling Radiation Damage to Pixel Sensors in the ATLAS Detector**

*Wednesday, October 16, 2019 9:00 AM (15 minutes)*

**Presenter:** LARI, Tommaso (University and INFN, Milano)

**Session Classification:** IPRD19

Contribution ID: 22

Type: **not specified**

## **The CMS Outer Tracker Upgrade for the High Luminosity LHC upgrade**

*Monday, October 14, 2019 5:30 PM (15 minutes)*

**Presenter:** LA ROSA, Alessandro (CERN)

**Session Classification:** IPRD19

Contribution ID: 23

Type: **not specified**

## **Performances of highly irradiated 3D and planar pixel sensors interconnected to RD53A readout chip**

*Wednesday, October 16, 2019 9:15 AM (15 minutes)*

**Presenter:** CECCARELLI, Rudy (Universita e INFN, Firenze (IT))

**Session Classification:** IPRD19



Contribution ID: 24

Type: **not specified**

## **Evaluation of the counting efficiency of a pcCVD diamond detector irradiated by 62 MeV/u carbon beams**

*Wednesday, October 16, 2019 9:30 AM (20 minutes)*

**Presenter:** SCHIRRU, Fabio (GSI, Darmstadt)

**Session Classification:** IPRD19

Contribution ID: 25

Type: **not specified**

## The Upgrade of LHCb VELO

*Monday, October 14, 2019 5:45 PM (20 minutes)*

**Presenter:** KOPCIEWICZ, Pawel (AGH University of Science and Technology (PL))

**Session Classification:** IPRD19

Contribution ID: 26

Type: **not specified**

## **Development of a 300 m fully-depleted monolithic active pixel sensor in standard 110 nm CMOS technology**

*Monday, October 14, 2019 6:05 PM (15 minutes)*

**Presenter:** GIAMPAOLO, Raffaele Aaron (INFN - National Institute for Nuclear Physics)

**Session Classification:** IPRD19

Contribution ID: 27

Type: **not specified**

## **HVMUX, High Voltage Multiplexing biasing for the ATLAS Strip Tracker Upgrade**

*Monday, October 14, 2019 6:20 PM (15 minutes)*

**Presenter:** VILLANI, Giulio (Rutherford Appleton Laboratory)

**Session Classification:** IPRD19

Contribution ID: 28

Type: **not specified**

## **The CT-PPS tracking system: performance in LHC-Run2 and prospects for LHC-Run3**

*Monday, October 14, 2019 6:35 PM (15 minutes)*

**Presenter:** OBERTINO, Maria Margherita (Universita e INFN Torino (IT))

**Session Classification:** IPRD19

Contribution ID: 29

Type: **not specified**

## **In-deep studies of time performance of the PICOSEC-Micromegas detector concept**

*Tuesday, October 15, 2019 9:00 AM (18 minutes)*

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

**Session Classification:** IPRD19

Contribution ID: **30**

Type: **not specified**

## **Final performances of the NA62 RICH detector**

*Tuesday, October 15, 2019 7:15 PM (5 minutes)*

**Presenter:** LENTI, Massimo (Universita e INFN, Firenze (IT))

**Session Classification:** IPRD19

Contribution ID: 31

Type: **not specified**

## **Beam-tests of CMS High Granularity Calorimeter prototypes at CERN**

*Tuesday, October 15, 2019 7:20 PM (5 minutes)*

**Presenter:** BONANOMI, Matteo (Centre National de la Recherche Scientifique (FR))

**Session Classification:** IPRD19



Contribution ID: 32

Type: **not specified**

## **Precision Timing with LYSO:Ce Crystals & SiPM Sensors in the CMS MTD Barrel Timing Layer**

*Tuesday, October 15, 2019 9:18 AM (18 minutes)*

**Presenter:** MALBERTI, Martina (Universita & INFN, Milano-Bicocca (IT))

**Session Classification:** IPRD19

Contribution ID: 33

Type: **not specified**

## **The operational experience, challenges and performance of the ATLAS Semiconductor Tracker during LHC Run-2**

*Tuesday, October 15, 2019 7:25 PM (5 minutes)*

**Presenter:** SOHNS, Fabian (Georg August Universitaet Goettingen (DE))

**Session Classification:** IPRD19

Contribution ID: 34

Type: **not specified**

## **Design and Performance Evaluation of an Adjustable-FOV PET Scanner**

*Tuesday, October 15, 2019 7:30 PM (5 minutes)*

**Presenter:** OZSAHIN, Ilker

**Session Classification:** IPRD19

Contribution ID: 35

Type: **not specified**

## **Optical Transparent Ceramic Scintillators for High Performance Brain PET**

*Tuesday, October 15, 2019 7:50 PM (5 minutes)*

**Presenter:** OZSAHIN, Ilker

**Session Classification:** IPRD19

Contribution ID: 36

Type: **not specified**

## **Precision Timing with Low Gain Avalanche Detectors in the CMS MTD Endcap Timing Layer**

*Tuesday, October 15, 2019 9:36 AM (18 minutes)*

**Presenter:** COSTA, Marco (Universita e INFN Torino (IT))

**Session Classification:** IPRD19

Contribution ID: 37

Type: **not specified**

## **The Micromegas chambers for the ATLAS New Small Wheel upgrade**

*Tuesday, October 15, 2019 9:54 AM (18 minutes)*

**Presenter:** DEDOVICH, Dmitri (Joint Institute for Nuclear Research (JINR))

**Session Classification:** IPRD19

Contribution ID: **38**

Type: **not specified**

## **Upgrade of the Resistive Plate Chamber detector for the high-background environments**

*Tuesday, October 15, 2019 10:12 AM (18 minutes)*

**Presenter:** PIZZIMENTO, Luca (INFN e Universita Roma Tor Vergata (IT))

**Session Classification:** IPRD19

Contribution ID: 39

Type: **not specified**

## **Upgrade of the CMS electromagnetic calorimeter for precision timing and energy measurement at the High Luminosity phase of the LHC**

*Tuesday, October 15, 2019 11:00 AM (20 minutes)*

**Presenter:** ARGIRO, Stefano (Universita di Torino and INFN (IT))

**Session Classification:** IPRD19



Contribution ID: 40

Type: **not specified**

## **Overview of latest developments in the CMS HGCALE upgrade project**

*Tuesday, October 15, 2019 11:20 AM (20 minutes)*

**Presenter:** ALYARI, Maral (Fermi National Accelerator Lab. (US))

**Session Classification:** IPRD19

Contribution ID: 41

Type: **not specified**

## **Study of Future 3D Calorimetry Based on LYSO or LaBrCe Crystals for High Energy Precision Physics**

*Tuesday, October 15, 2019 11:40 AM (15 minutes)*

**Presenter:** SCHWENDIMANN, Patrick (PSI)

**Session Classification:** IPRD19

Contribution ID: 42

Type: **not specified**

## **A shashlyk Electromagnetic calorimeter system for NICA-MPD**

*Tuesday, October 15, 2019 11:55 AM (20 minutes)*

**Presenter:** LI, Yulei

**Session Classification:** IPRD19

Contribution ID: 43

Type: **not specified**

## **Electromagnetic Data Libraries: recent evolutions and new perspectives**

*Tuesday, October 15, 2019 12:15 PM (15 minutes)*

**Presenter:** PIA, Maria Grazia (INFN e Universita Genova (IT))

**Session Classification:** IPRD19

Contribution ID: 44

Type: **not specified**

## **First results on the performance of the PADME electromagnetic calorimeter**

*Tuesday, October 15, 2019 12:30 PM (15 minutes)*

**Presenter:** PIPERNO, Gabriele

**Session Classification:** IPRD19

Contribution ID: 45

Type: **not specified**

## **Commissioning and testing of real-size triple GEM prototypes for CBM-MUCH in the mCBM experiment at SIS18 facility of GSI**

*Tuesday, October 15, 2019 2:15 PM (15 minutes)*

**Presenter:** KUMAR, Ajit (Variable Energy Cyclotron Centre)

**Session Classification:** IPRD19

Contribution ID: 46

Type: **not specified**

## **Background in the CMS muon detectors: simulation and measure with pp collision data**

*Tuesday, October 15, 2019 2:30 PM (20 minutes)*

**Presenter:** FASANELLA, Daniele (CERN)

**Session Classification:** IPRD19

Contribution ID: 47

Type: **not specified**

## **Upgrade to the CMS Cathode-Strip-Muon System for the HL-LHC**

*Tuesday, October 15, 2019 2:50 PM (20 minutes)*

**Presenter:** MANGANELLI, Nick (University of California Riverside (US))

**Session Classification:** IPRD19



Contribution ID: 48

Type: **not specified**

## **Study of the Effects of Radiation at the CERN Gamma Irradiation Facility on the CMS Drift Tubes Muon Detector for the HL-LHC**

*Tuesday, October 15, 2019 3:10 PM (15 minutes)*

**Presenter:** ALVAREZ GONZALEZ, Barbara (Universidad de Oviedo (ES))

**Session Classification:** IPRD19

Contribution ID: 49

Type: **not specified**

## **Advance studies performed on triple-GEM detector built using commercially manufactured foils**

*Tuesday, October 15, 2019 3:25 PM (15 minutes)*

**Presenter:** GOLLA, Mohit (University of Delhi (IN))

**Session Classification:** IPRD19

Contribution ID: 50

Type: **not specified**

## **Aging Studies of Triple-GEM detectors for future upgrades of the CMS endcap muon system at the HL-LHC**

*Tuesday, October 15, 2019 3:40 PM (20 minutes)*

**Presenter:** FIORINA, Davide (Universita and INFN (IT))

**Session Classification:** IPRD19

Contribution ID: 51

Type: **not specified**

## **Developments of radiopure ZnWO<sub>4</sub> anisotropic scintillators and improvements of their response at keV region**

*Tuesday, October 15, 2019 4:30 PM (15 minutes)*

**Presenter:** CERULLI, Riccardo

**Session Classification:** IPRD19

Contribution ID: 52

Type: **not specified**

## **The cryogenic electronics for Dark Side SiPM readout**

*Tuesday, October 15, 2019 4:45 PM (15 minutes)*

**Presenter:** CONSIGLIO, Lucia (INFN)

**Session Classification:** IPRD19

Contribution ID: 53

Type: **not specified**

## **The BDX detector prototype for Dark Matter searches in a Beam Dump eXperiment @ JLAB**

*Tuesday, October 15, 2019 5:00 PM (15 minutes)*

**Presenter:** BONDI, Mariangela (INFN - National Institute for Nuclear Physics)

**Session Classification:** IPRD19

Contribution ID: 54

Type: **not specified**

## **KM3NeT electronics acquisition: the new version of the Central Logic Board and its related Power Board**

*Tuesday, October 15, 2019 5:15 PM (15 minutes)*

**Presenter:** VERSARI, Federico (University of Bologna)

**Session Classification:** IPRD19

Contribution ID: 55

Type: **not specified**

## **Search for Light Dark Matter with NEWS-G**

*Tuesday, October 15, 2019 5:30 PM (20 minutes)*

**Presenter:** NIKOLOPOULOS, Konstantinos (University of Birmingham (GB))

**Session Classification:** IPRD19



Contribution ID: 56

Type: **not specified**

## **Dark Matter in CCDs at Modane (DAMIC-M): a silicon detector apparatus searching for low-energy physics processes**

*Tuesday, October 15, 2019 5:50 PM (20 minutes)*

**Presenter:** LEE, Steven Juhyung (University of Zurich (CH))

**Session Classification:** IPRD19

Contribution ID: 57

Type: **not specified**

## **PandaX-III: a high pressure Xenon detector for neutrinoless double beta decay search**

*Tuesday, October 15, 2019 6:10 PM (20 minutes)*

**Presenter:** WANG, Shaobo

**Session Classification:** IPRD19

Contribution ID: 58

Type: **not specified**

## **CUPID: a new bolometric detector for rare events experiment**

*Tuesday, October 15, 2019 6:30 PM (20 minutes)*

**Presenter:** TOMEI, Claudia (INFN - National Institute for Nuclear Physics)

**Session Classification:** IPRD19

Contribution ID: 59

Type: **not specified**

## **Evolution of the design of Ultra Fast Silicon to cope with high irradiation fluences and fine segmentation**

*Tuesday, October 15, 2019 7:55 PM (5 minutes)*

**Presenter:** FERRERO, Marco (Universita e INFN Torino (IT))

**Session Classification:** IPRD19

Contribution ID: **60**

Type: **not specified**

## **The NA62 GigaTracker: a low mass high intensity beam 4D tracker with 65 ps time resolution on tracks**

*Tuesday, October 15, 2019 8:00 PM (5 minutes)*

**Presenter:** PINNA ANGIONI, Gian Luca (Universita e INFN Torino (IT))

**Session Classification:** IPRD19

Contribution ID: **61**

Type: **not specified**

## **Tracking with timing: the TIMESPOT project**

*Tuesday, October 15, 2019 8:05 PM (5 minutes)*

**Presenter:** MULARGIA, Roberto (Universita e INFN Genova (IT))

**Session Classification:** IPRD19

Contribution ID: **62**

Type: **not specified**

## **Vertex and Tracking Detector R&D for CLIC**

*Tuesday, October 15, 2019 8:10 PM (5 minutes)*

**Presenter:** WILLIAMS, Morag Jean (University of Glasgow (GB))

**Session Classification:** IPRD19

Contribution ID: 63

Type: **not specified**

## **The laser diode calibration system of the Icarus T600 detector at FNAL**

*Tuesday, October 15, 2019 8:15 PM (5 minutes)*

**Presenter:** BONESINI, Maurizio (Universita & INFN, Milano-Bicocca (IT))

**Session Classification:** IPRD19



Contribution ID: **64**

Type: **not specified**

## **A UV laser test bench for gaseous detectors**

*Tuesday, October 15, 2019 8:20 PM (5 minutes)*

**Presenter:** PELLECCCHIA, Antonello (University of Bari)

**Session Classification:** IPRD19

Contribution ID: 65

Type: **not specified**

## The DUNE Dual-Phase liquid argon TPC

*Tuesday, October 15, 2019 8:35 PM (5 minutes)*

**Presenter:** CHARDONNET, Etienne (Centre National de la Recherche Scientifique (FR))

**Session Classification:** IPRD19

Contribution ID: 66

Type: **not specified**

## **TCAD Silicon device simulation for high level of radiation damage**

*Tuesday, October 15, 2019 8:40 PM (5 minutes)*

**Presenter:** PAROLIA, Shubhi (INFN Sezione di Pisa, Universita' e Scuola Normale Superiore, P)

**Session Classification:** IPRD19

Contribution ID: 67

Type: **not specified**

## The Upgrade II of LHCb VELO

*Tuesday, October 15, 2019 8:50 PM (5 minutes)*

**Presenter:** KOPCIEWICZ, Pawel (AGH University of Science and Technology (PL))

**Session Classification:** IPRD19

Contribution ID: **68**

Type: **not specified**

## **Innovative amplifiers for muon spectroscopy experiments at RAL**

*Tuesday, October 15, 2019 8:55 PM (5 minutes)*

**Presenter:** ROSSELLA, Massimo (Universita and INFN (IT))

**Session Classification:** IPRD19

Contribution ID: 69

Type: **not specified**

## **Characterisation of a prototype light detection system with a radioactive $^{241}\text{Am}$ alpha source in Liquid Argon at the CERN test facility**

*Tuesday, October 15, 2019 9:00 PM (5 minutes)*

**Presenter:** RASELLI, Gian Luca (Universita and INFN (IT))

**Session Classification:** IPRD19

Contribution ID: 70

Type: **not specified**

## **Development of a Simulation Framework for Spherical Proportional Counter**

*Tuesday, October 15, 2019 9:05 PM (5 minutes)*

**Presenter:** WARD, Robert James (University of Birmingham (GB))

**Session Classification:** IPRD19

Contribution ID: 71

Type: **not specified**

## **Performance of the charged particle detectors of the PADME experiment**

*Tuesday, October 15, 2019 7:40 PM (5 minutes)*

**Presenter:** OLIVA, Federica (INFN - National Institute for Nuclear Physics)

**Session Classification:** IPRD19



Contribution ID: 72

Type: **not specified**

## **Discharge mitigation strategies for CMS Triple-GEM detectors**

*Tuesday, October 15, 2019 7:35 PM (5 minutes)*

**Presenter:** IVONE, Francesco (Universita e INFN, Bari (IT))

**Session Classification:** IPRD19

Contribution ID: 73

Type: **not specified**

## **Radiation induced degradation in a 150-nm CMOS SPADs device**

*Wednesday, October 16, 2019 9:50 AM (15 minutes)*

**Presenter:** CAMPAJOLA, marcello (INFN and University of Naples "Federico II")

**Session Classification:** IPRD19

Contribution ID: 74

Type: **not specified**

## **Neutron Damage of ATLAS Endcap alignment CCDS**

*Wednesday, October 16, 2019 10:05 AM (15 minutes)*

**Presenter:** PAZOS, Camila (Brandeis University (US))

**Session Classification:** IPRD19

Contribution ID: 75

Type: **not specified**

## **Cerium-doped Fused-Silica Fibers for Particle Physics Detectors**

*Wednesday, October 16, 2019 10:20 AM (20 minutes)*

**Presenter:** DE GUIO, Federico (Texas Tech University)

**Session Classification:** IPRD19

Contribution ID: 76

Type: **not specified**

## **ArgonCube: scalable modular approach for large LArTPCs**

*Wednesday, October 16, 2019 11:10 AM (20 minutes)*

**Presenter:** KRESLO, Igor (Universitaet Bern (CH))

**Session Classification:** IPRD19

Contribution ID: 77

Type: **not specified**

## **The ICARUS T600 detector as far detector within SBN program**

*Wednesday, October 16, 2019 11:30 AM (20 minutes)*

**Presenter:** DIWAN, Milind Vaman (Brookhaven National Laboratory (US))

**Session Classification:** IPRD19

Contribution ID: 78

Type: **not specified**

## **A comparison between scintillation light analog and digital trigger for large volume Liquid Argon Time Projection Chambers**

*Wednesday, October 16, 2019 11:50 AM (15 minutes)*

**Presenter:** RASELLI, Gian Luca (Universita and INFN (IT))

**Session Classification:** IPRD19

Contribution ID: 79

Type: **not specified**

# LiquidO: Novel Opaque Neutrino Detection Technology

*Wednesday, October 16, 2019 12:05 PM (20 minutes)*

**Presenter:** DUSINI, Stefano (INFN Padova)

**Session Classification:** IPRD19



Contribution ID: **80**

Type: **not specified**

## **Decay tunnel instrumentation for the ENUBET neutrino beam**

*Wednesday, October 16, 2019 12:25 PM (15 minutes)*

**Presenter:** MASCAGNA, Valerio (Universita & INFN, Milano-Bicocca (IT))

**Session Classification:** IPRD19

Contribution ID: **81**

Type: **not specified**

## **The Detectors of the Mu2e Experiment**

*Wednesday, October 16, 2019 12:40 PM (20 minutes)*

**Presenter:** GIOVANNELLA, Simona (Laboratori Nazionali di Frascati (LNF))

**Session Classification:** IPRD19

Contribution ID: **82**

Type: **not specified**

## **Qualification of a compact neutron detector based on SiPM**

*Wednesday, October 16, 2019 2:30 PM (20 minutes)*

**Presenter:** SANTORO, Romualdo (CERN)

**Session Classification:** IPRD19

Contribution ID: 83

Type: **not specified**

## **Development of gamma insensitive Silicon Carbide diagnostics to qualify intense thermal neutron fields**

*Wednesday, October 16, 2019 2:50 PM (20 minutes)*

**Presenter:** SANS PLANELL, Oriol (Universita e INFN Torino (IT))

**Session Classification:** IPRD19

Contribution ID: 84

Type: **not specified**

## **LaBr3:Ce crystals with SiPM array readout and temperature control for the FAMU experiment at RAL**

*Wednesday, October 16, 2019 3:10 PM (15 minutes)*

**Presenter:** BONESINI, Maurizio (Universita & INFN, Milano-Bicocca (IT))

**Session Classification:** IPRD19

Contribution ID: 85

Type: **not specified**

## **Use of Silicon Photomultiplier to directly detect X-ray**

*Wednesday, October 16, 2019 3:25 PM (20 minutes)*

**Presenter:** FIANDRINI, Emanuele (Universita e INFN, Perugia (IT))

**Session Classification:** IPRD19

Contribution ID: **86**

Type: **not specified**

## **New CAEN R&D for power supplies and data acquisition systems**

*Wednesday, October 16, 2019 4:30 PM (20 minutes)*

**Presenter:** Dr GIORDANO, Ferdinando

**Session Classification:** IPRD19

Contribution ID: 87

Type: **not specified**

## **Reliability studies for the Switching Core Board of the White Rabbit Switch: FIDES and Highly Accelerated test**

*Wednesday, October 16, 2019 4:50 PM (20 minutes)*

**Presenter:** MUSICO, Paolo (INFN e Universita Genova (IT))

**Session Classification:** IPRD19



Contribution ID: **88**

Type: **not specified**

## **New ideas on possible detectors for Dark Matter**

*Wednesday, October 16, 2019 5:10 PM (15 minutes)*

**Presenter:** GUARISE, Marco (Universita e INFN, Ferrara (IT))

**Session Classification:** IPRD19

Contribution ID: **89**

Type: **not specified**

## **HAWC's-Eye a novel Imaging Atmospheric Telescope**

*Wednesday, October 16, 2019 6:00 PM (20 minutes)*

**Presenter:** ALFARO MOLINA, Jose Ruben (Universidad Nacional Autonoma (MX))

**Session Classification:** IPRD19

Contribution ID: **90**

Type: **not specified**

## **Beam tests of a prototype of the Radiation Hard Electron Monitor to be flown in the JUICE mission**

*Wednesday, October 16, 2019 6:20 PM (20 minutes)*

**Presenter:** PINTO, Marco (LIP)

**Session Classification:** IPRD19

Contribution ID: 91

Type: **not specified**

# Digitized Waveform Signal Processing for Fast Timing

*Thursday, October 17, 2019 9:00 AM (18 minutes)*

**Presenter:** Dr WHITE, Sebastian (University of Virginia (US))

**Session Classification:** IPRD19

Contribution ID: 92

Type: **not specified**

## **The CMS Precision Proton Spectrometer timing system: performance in Run 2, future upgrades and sensor radiation hardness studies**

*Thursday, October 17, 2019 9:18 AM (18 minutes)*

**Presenter:** BOSSINI, Edoardo (CERN & INFN-Pisa (IT))

**Session Classification:** IPRD19

Contribution ID: 93

Type: **not specified**

## **Hydrogenated amorphous silicon dectectors for particle detection, beam flux monitoring and dosimetry in high-dose radiation environment**

*Thursday, October 17, 2019 9:36 AM (18 minutes)*

**Presenter:** MENICHELLI, Mauro (Universita e INFN, Perugia (IT))

**Session Classification:** IPRD19

Contribution ID: 94

Type: **not specified**

## **Low energy nuclei detection with ALPIDE detector**

*Thursday, October 17, 2019 9:54 AM (18 minutes)*

**Presenter:** RICCI, Ester (Universita degli Studi di Trento and INFN (IT))

**Session Classification:** IPRD19

Contribution ID: 95

Type: **not specified**

## **A multichannel front-end readout ASIC for high flux and high time resolution applications with UFSD**

*Thursday, October 17, 2019 10:12 AM (18 minutes)*

**Presenter:** OLAVE, Elias Jonhatan (Universita e INFN Torino (IT))

**Session Classification:** IPRD19



Contribution ID: 96

Type: **not specified**

## **Dosimetric approaches for flash radiotherapy beams**

*Thursday, October 17, 2019 11:15 AM (20 minutes)*

**Presenter:** CIRRONE, Pablo

**Session Classification:** IPRD19

Contribution ID: 97

Type: **not specified**

## **First Prototype of a Solid-State Imaging Probe for Radio-Guided Surgery**

*Thursday, October 17, 2019 11:35 AM (20 minutes)*

**Presenter:** SULAJ, Arta (Universita degli studi di Siena (IT))

**Session Classification:** IPRD19

Contribution ID: 98

Type: **not specified**

## **Characterization of monolithic GAGG:Ce for gamma imaging in Nuclear Medicine**

*Thursday, October 17, 2019 11:55 AM (20 minutes)*

**Presenter:** BETTIOL, Marco (Universita di Roma I "La Sapienza"-Universita & INFN, Roma I-Unk)

**Session Classification:** IPRD19

Contribution ID: 99

Type: **not specified**

## **Performance of the charged particle detectors of the PADME experiment**

*Thursday, October 17, 2019 12:15 PM (12 minutes)*

**Presenter:** OLIVA, Federica (INFN - National Institute for Nuclear Physics)

**Session Classification:** IPRD19

Contribution ID: **100**

Type: **not specified**

## **Beam-tests of CMS High Granularity Calorimeter prototypes at CERN**

*Thursday, October 17, 2019 12:27 PM (12 minutes)*

**Presenter:** BONANOMI, Matteo (Centre National de la Recherche Scientifique (FR))

**Session Classification:** IPRD19

Contribution ID: **101**

Type: **not specified**

## **Upgrade of the CMS Muon Spectrometer in the forward region with the GEM technology**

*Thursday, October 17, 2019 2:15 PM (20 minutes)*

**Presenter:** BIANCO, Michele (CERN)

**Session Classification:** IPRD19

Contribution ID: **102**

Type: **not specified**

## **Study of high time resolution MRPC with the waveform digitizer system**

*Thursday, October 17, 2019 2:35 PM (20 minutes)*

**Presenter:** YU, Yancheng (Tsinghua University (CN))

**Session Classification:** IPRD19

Contribution ID: **103**

Type: **not specified**

## **Performance studies of RPC detectors with new environmentally friendly gas mixtures in presence of LHC-like radiation background**

*Thursday, October 17, 2019 3:10 PM (20 minutes)*

**Presenter:** RIGOLETTI, Gianluca (Universite Claude Bernard Lyon I (FR))

**Session Classification:** IPRD19



Contribution ID: **104**

Type: **not specified**

## **R&D studies on tetrafluoropropene-based gas mixtures with low environmental impact for Resistive Plate Chambers**

*Thursday, October 17, 2019 3:30 PM (15 minutes)*

**Presenter:** BIANCHI, Antonio (Universita e INFN Torino (IT))

**Session Classification:** IPRD19

Contribution ID: **105**

Type: **not specified**

## **Pure machine-learning analysis of the response of a plastic scintillator to charged particles**

*Thursday, October 17, 2019 4:15 PM (20 minutes)*

**Presenter:** FOLLEGA, Francesco Maria (Universita degli Studi di Trento and INFN (IT))

**Session Classification:** IPRD19

Contribution ID: **106**

Type: **not specified**

## **The ATLAS Hardware Track Trigger design towards first prototypes**

*Thursday, October 17, 2019 4:35 PM (20 minutes)*

**Presenter:** MARTYNIUK, Alex Christopher (University of Victoria (CA))

**Session Classification:** IPRD19

Contribution ID: **107**

Type: **not specified**

## **NA62 data acquisition upgrade**

*Thursday, October 17, 2019 4:55 PM (20 minutes)*

**Presenter:** BORETTO, Marco (Universita e INFN Torino (IT))

**Session Classification:** IPRD19

Contribution ID: **108**

Type: **not specified**

## concluding remarks

*Thursday, October 17, 2019 5:15 PM (10 minutes)*

**Presenter:** PERROTTA, Andrea (Universita e INFN, Bologna (IT))

**Session Classification:** IPRD19

Contribution ID: **109**

Type: **not specified**

## **The performance of the diamond active target of the PADME experiment**

*Tuesday, October 15, 2019 8:25 PM (5 minutes)*

**Presenter:** OCEANO, Isabella (Lecce)

**Session Classification:** IPRD19

Contribution ID: **110**

Type: **not specified**

## **Kilovoltage rotational breast radiotherapy with the BriXS source**

*Tuesday, October 15, 2019 8:30 PM (5 minutes)*

**Presenter:** SARNO, Antonio (Napoli)

**Session Classification:** IPRD19

Contribution ID: 111

Type: **not specified**

## **Imaging performance dependence on crystal absorption properties: the CRY018 and CRY019 comparison**

*Tuesday, October 15, 2019 8:45 PM (5 minutes)*

**Presenter:** FALCONI, Rita (Roma1)

**Session Classification:** IPRD19



Contribution ID: 112

Type: **not specified**

## **Use of the Peak-Detector for gain calibration of the read-out ASIC CITIROC**

*Tuesday, October 15, 2019 7:45 PM (5 minutes)*

**Presenter:** IMPIOMBATO, Domenico (INAF)

**Session Classification:** IPRD19

Contribution ID: 113

Type: **not specified**

## **Laboratory tests for MIR light detection and transport with specialty optical fibers**

*Wednesday, October 16, 2019 3:45 PM (15 minutes)*

**Presenter:** BENOCCI, Roberto (Milano Bicocca)

**Session Classification:** IPRD19

Contribution ID: **114**

Type: **not specified**

## **JUNO detector design and construction**

*Wednesday, October 16, 2019 5:25 PM (20 minutes)*

**Presenter:** LOMBARDI, Paolo (INFN Milano)

**Session Classification:** IPRD19

Contribution ID: 115

Type: **not specified**

## **The Gas Pixel Detector for the IXPE mission**

*Wednesday, October 16, 2019 5:45 PM (10 minutes)*

**Presenter:** MANFREDA, Alberto (INFN Pisa)

**Session Classification:** IPRD19

Contribution ID: 116

Type: **not specified**

## **A novel approach for lateral dose profile reconstruction with a scintillator-based system**

*Thursday, October 17, 2019 11:00 AM (15 minutes)*

**Session Classification:** IPRD19

Contribution ID: **117**

Type: **not specified**

## **Find eco-gas mixtures for a coupled readout MRPC**

*Thursday, October 17, 2019 2:55 PM (15 minutes)*

**Session Classification:** IPRD19

Contribution ID: 118

Type: **not specified**

## **Comparison between photon detection efficiency and TPB coating stability of PMTs immersed in liquid argon**

*Tuesday, October 15, 2019 9:10 PM (5 minutes)*

**Presenter:** VARGAS, Danaïsis (Universitat Autònoma de Barcelona (ES))

**Session Classification:** IPRD19