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

Report of Contributions

Contribution ID: 1 Type: not specified

#### Poster session - Wine & Cheese

Welcome address

Contribution ID: 2 Type: not specified

#### Welcome address

Monday 14 October 2019 09:00 (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 14 October 2019 09:10 (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 14 October 2019 09:30 (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 14 October 2019 09:50 (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 14 October 2019 10:10 (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 14 October 2019 11:00 (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 14 October 2019 11:15 (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 14 October 2019 11:30 (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 14 October 2019 11:45 (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 14 October 2019 12:05 (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 14 October 2019 12:25 (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 14 October 2019 14:15 (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 14 October 2019 14:40 (20 minutes)

Presenter: PETRINGA, Giada (LNS)

Session Classification: IPRD19

Contribution ID: 15 Type: not specified

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

Monday 14 October 2019 15:00 (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 14 October 2019 15:20 (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 14 October 2019 15:40 (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 14 October 2019 16:30 (20 minutes)

Presenter: ALPIGIANI, Cristiano

Session Classification: IPRD19

Contribution ID: 19 Type: not specified

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

Monday 14 October 2019 16:50 (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 14 October 2019 17:10 (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 16 October 2019 09:00 (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 14 October 2019 17:30 (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 16 October 2019 09:15 (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 16 October 2019 09:30 (20 minutes)

Presenter: SCHIRRU, Fabio (GSI, Darmstadt)

Session Classification: IPRD19

Contribution ID: 25 Type: not specified

#### The Upgrade of LHCb VELO

Monday 14 October 2019 17:45 (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 14 October 2019 18:05 (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 14 October 2019 18:20 (15 minutes)

Presenter: VILLANI, Giullio (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 14 October 2019 18:35 (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 15 October 2019 09:00 (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 15 October 2019 19:15 (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 15 October 2019 19:20 (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 15 October 2019 09:18 (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 15 October 2019 19:25 (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 15 October 2019 19:30 (5 minutes)

Presenter: OZSAHIN, Ilker

Session Classification: IPRD19

Contribution ID: 35 Type: not specified

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

Tuesday 15 October 2019 19:50 (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 15 October 2019 09:36 (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 15 October 2019 09:54 (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 15 October 2019 10:12 (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 15 October 2019 11:00 (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 HGCAL upgrade project

Tuesday 15 October 2019 11:20 (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 15 October 2019 11:40 (15 minutes)

Presenter: SCHWENDIMANN, Patrick (PSI)

Session Classification: IPRD19

Contribution ID: 42 Type: not specified

## A shashlyk Electromagnetic calorimeter system for NICA-MPD

Tuesday 15 October 2019 11:55 (20 minutes)

Presenter: LI, Yulei

Session Classification: IPRD19

Contribution ID: 43 Type: not specified

## Electromagnetic Data Libraries: recent evolutions and new perspectives

Tuesday 15 October 2019 12:15 (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 15 October 2019 12:30 (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 15 October 2019 14:15 (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 15 October 2019 14:30 (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 15 October 2019 14:50 (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 15 October 2019 15:10 (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 15 October 2019 15:25 (15 minutes)

**Presenter:** GOLA, 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 15 October 2019 15:40 (20 minutes)

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

Session Classification: IPRD19

Contribution ID: 51 Type: not specified

# Developments of radiopure ZnWO4 anisotropic scintillators and improvements of their response at keV region

Tuesday 15 October 2019 16:30 (15 minutes)

Presenter: CERULLI, Riccardo

Session Classification: IPRD19

Contribution ID: 52 Type: not specified

## The cryogenic electronics for Dark Side SiPM readout

Tuesday 15 October 2019 16:45 (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 15 October 2019 17:00 (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 15 October 2019 17:15 (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 15 October 2019 17:30 (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 15 October 2019 17:50 (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 15 October 2019 18:10 (20 minutes)

Presenter: WANG, Shaobo

Session Classification: IPRD19

Contribution ID: 58 Type: not specified

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

Tuesday 15 October 2019 18:30 (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 15 October 2019 19:55 (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 15 October 2019 20:00 (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 15 October 2019 20:05 (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 15 October 2019 20:10 (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 15 October 2019 20:15 (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 15 October 2019 20:20 (5 minutes)* 

Presenter: PELLECCHIA, Antonello (University of Bari)

Session Classification: IPRD19

Contribution ID: 65 Type: not specified

#### The DUNE Dual-Phase liquid argon TPC

Tuesday 15 October 2019 20:35 (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 15 October 2019 20:40 (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 15 October 2019 20:50 (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 15 October 2019 20:55 (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 241Am alpha source in Liquid Argon at the CERN test facility

Tuesday 15 October 2019 21:00 (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 15 October 2019 21:05 (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 15 October 2019 19:40 (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 15 October 2019 19:35 (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 16 October 2019 09:50 (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 16 October 2019 10:05 (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 16 October 2019 10:20 (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 16 October 2019 11:10 (20 minutes)

Argon<br/>Cube: scalable modular ap  $\, \cdots \,$ 

**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 16 October 2019 11:30 (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 16 October 2019 11:50 (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 16 October 2019 12:05 (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 16 October 2019 12:25 (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 16 October 2019 12:40 (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 16 October 2019 14:30 (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 16 October 2019 14:50 (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 16 October 2019 15:10 (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 16 October 2019 15:25 (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 16 October 2019 16:30 (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 16 October 2019 16:50 (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 16 October 2019 17:10 (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 16 October 2019 18:00 (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 16 October 2019 18:20 (20 minutes)

Presenter: PINTO, Marco (LIP)

Session Classification: IPRD19

Contribution ID: 91 Type: not specified

## Digitized Waveform Signal Processing for Fast Timing

Thursday 17 October 2019 09:00 (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 17 October 2019 09:18 (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 17 October 2019 09:36 (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 17 October 2019 09:54 (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 17 October 2019 10:12 (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 17 October 2019 11:15 (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 17 October 2019 11:35 (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 17 October 2019 11:55 (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 17 October 2019 12:15 (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 17 October 2019 12:27 (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 17 October 2019 14:15 (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 17 October 2019 14:35 (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 17 October 2019 15:10 (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 17 October 2019 15:30 (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 17 October 2019 16:15 (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 17 October 2019 16:35 (20 minutes)

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

Session Classification: IPRD19

Contribution ID: 107 Type: not specified

#### NA62 data acquisition upgrade

Thursday 17 October 2019 16:55 (20 minutes)

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

Session Classification: IPRD19

Contribution ID: 108 Type: not specified

#### concluding remarks

Thursday 17 October 2019 17:15 (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 15 October 2019 20:25 (5 minutes)

Presenter: OCEANO, Isabella (Lecce)

Session Classification: IPRD19

Contribution ID: 110 Type: not specified

## Kilovoltage rotational breast radiotheraphy with the BriXS source

Tuesday 15 October 2019 20:30 (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 15 October 2019 20:45 (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 15 October 2019 19:45 (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 16 October 2019 15:45 (15 minutes)

Presenter: BENOCCI, Roberto (Milano Bicocca)

Session Classification: IPRD19

Contribution ID: 114 Type: not specified

#### JUNO detector design and construction

Wednesday 16 October 2019 17:25 (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 16 October 2019 17:45 (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 17 October 2019 11:00 (15 minutes)

Session Classification: IPRD19

Contribution ID: 117 Type: not specified

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

Thursday 17 October 2019 14:55 (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 15 October 2019 21:10 (5 minutes)* 

Presenter: VARGAS, Danaisis (Universitat Autonoma de Barcelona (ES))

Session Classification: IPRD19