

## **Session Program**

**27 June 2021 to 1 July 2021**



# **22nd International Workshop on Radiation Imaging Detectors**

## ***Oral presentations***

Online, Gather.town

# Monday 28 June

10:10

## Oral presentations: ASICs 1

**Session** | **Location:** Online, Zoom | **Convener:** Bernd Schmitt

10:10–10:30 **A new AGIPD detector generation**

**Speaker**

Torsten Laurus

10:30–10:50

**FASTpix - small collection electrode CMOS sensors for precise time-stamping capabilities, high efficiency in thin sensors and high radiation tolerance**

**Speaker**

Magdalena Munker

10:50

11:20

## Oral presentations: Particles

**Session** | **Location:** Online, Zoom | **Convener:** Joaquim Marques Ferreira Dos Santos

11:20–11:40

**High-angular resolution tracking of energetic charged particles in wide field-of-view with compact tracker telescope MiniPIX Timepix3 1×2 Stack**

**Speaker**

Dr Carlos Granja

11:40–12:00

**Electron detection with CdTe and GaAs sensors using the charge integrating hybrid pixel detector JUNGFRAU**

**Speaker**

Erik Fröjdh

12:00–12:20

**Experimental study of the adaptive gain feature for improved position sensitive ion spectroscopy with Timepix2**

**Speaker**

Benedikt Ludwig Bergmann

12:20

14:20

## Oral presentations: Medical

**Session** | **Location:** Online, Zoom | **Convener:** Renata Longo

14:20–14:40 **Quantum Entangled PET Imaging**

**Speaker**

Alexander Cherlin

14:40–15:00

**The timing detectors of the FOOT experiment: the charge changing cross sections measured using 160 beams of 400 MeV/u energy**

**Speaker**

Angelica De Gregorio

15:00

15:30

**Oral presentations: Systems****Session** | **Location:** Online, Zoom | **Convener:** Eduardo Cortina Gil

15:30-15:50

**Development of an intensified neutron camera system for high sensitivity white-beam imaging****Speaker**

Dr Paul Hink

15:50-16:10

**The new GEM station GE1/1 of the CMS muon detector: status, commissioning and early performance studies****Speaker**

Federica Maria Simone

16:10-16:30

**Pixel chamber: a solid-state active-target for 3D imaging of charm and beauty****Speaker**

Alice Mulliri

16:30-16:50

**Development, construction and tests of the Mu2e electromagnetic calorimeter mechanical structures****Speaker**

Dr Daniele Pasciuto

16:50

## Tuesday 29 June

09:50

### Oral presentations: Muons

**Session** | **Location:** Online, Zoom | **Convener:** Michael Tytgat

09:50–10:10

#### From muography to muon tomography of large structures

**Speaker**

Sebastien Procureur

10:10–10:30

#### Three years of muography at Mount Etna: results and future perspectives

**Speaker**

Dr Giuseppe Gallo

10:30

11:00

### Oral presentations: Readout

**Session** | **Location:** Online, Zoom | **Convener:** Roelof de Vries

11:00–11:20

#### WiggleCam: a method to cope with inter-sensor gaps for high-framerate tiled sensor arrays

**Speaker**

Mr Frederic Van Assche

11:20–11:40

#### Development of Data Correction Techniques for the 1M Large Pixel Detector at FXE

**Speaker**

Rhian Mair Wheeler

11:40–12:00

#### A Low-Noise Pixelated ASIC for the Readout of Micro-Channel Plates

**Speaker**

Mr Edoardo Fabbrica

12:00

13:30

### Oral presentations: X-rays

**Session** | **Location:** Online, Zoom | **Convener:** Matthieu Boone

13:30–13:50

#### On the possibility to utilize a PCO Edge 4.2 bi scientific CMOS imager for extended ultra violet and soft X-ray photon detection

**Speaker**

Ralf Hendrik Menk

13:50–14:10

#### 18k Pixel Readout IC for CdTe Detectors Operating in Single Photon Counting Mode with Interpixel Communication

**Speaker**

Pawel Grybos

14:10-14:30

**Multi-bin energy-sensitive Micro-CT using large area photon-counting detectors  
Timepix**

**Speaker**  
Mr Jan Dudak

14:30-14:50

**First user experiments of the PERCIVAL soft X-ray imager**

**Speaker**  
Jonathan Correa Magdalena

14:50

15:20

**Oral presentations: ASICs 2**

**Session** | **Location:** Online, Zoom | **Convener:** Cinzia Da Via

15:20-15:40

**SparkPix-ED: a readout ASIC with 1 MHz frame-rate for rare event experiments at LCLS-II**

**Speaker**  
lorenzo rota

15:40-16:00

**Characterization of the ePixM monolithic CMOS sensor for soft X-rays**

**Speaker**  
lorenzo rota

16:00-16:20

**X-ray imaging of moving objects using on-chip TDI and MDX methods with single photon counting CdTe hybrid pixel detector**

**Speaker**  
Miroslaw Zoladz

16:20

## Wednesday 30 June

09:50

### Oral presentations: LHC

**Session** | **Location:** Online, Zoom | **Convener:** Andrea Giammanco

09:50–10:10 **The LHCb Vertex Locator Upgrade**

**Speaker**

Pawel Kopciewicz

10:10–10:30 **System Tests for the ATLAS ITk Pixel Detector**

**Speakers**

Jens Weingarten, Paul Dervan

10:30

11:00

### Oral presentations: Materials

**Session** | **Location:** Online, Zoom | **Convener:** Dr Seppo Nenonen

11:00–11:20

**Study of charge carrier transport properties and lifetimes in HR GaAs:Cr with Timepix3**

**Speaker**

Dr Petr Smolyanskiy

11:20–11:40

**High-spatial resolution measurements with GaAs sensor with the charge integrating MÖNCH detector**

**Speaker**

Sabina Chiriotti Alvarez

11:40–12:00

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

**Speaker**

Dr Keida Kanxheri

12:00

14:20

### Oral presentations: Applications

**Session** | **Location:** Online, Zoom | **Convener:** valeria rosso

14:20–14:40

**Imaging of Biomacromolecules in Mass Spectrometry Using Timepix Detectors**

**Speaker**

Ms Anjusha Mathew

14:40–15:00

**Studies of high-field QED with the LUXE experiment at the European XFEL**

**Speaker**

Maryna Borysova

15:00

15:30

**Oral presentations: ASICs 3****Session** | **Location:** Online, Zoom | **Convener:** heinz graafsma

15:30-15:50

**8b 10MS/s Differential SAR ADC in 28 nm CMOS for Precise Energy Measurement****Speaker**

Piotr Kaczmarczyk

15:50-16:10

**Timepix4, a large area pixel detector readout chip which can be tiled on 4 sides providing sub-200ps timestamp binning****Speaker**

Xavi Llopart Cudie

16:10-16:30

**The MYTHEN III single photon counting detector for powder diffraction****Speaker**

Roberto Dinapoli

16:30

## Thursday 1 July

09:50

### Oral presentations: Applications 2

Session | Location: Online, Zoom | Convener: Ralf Hendrik Menk

09:50–10:10

#### A Miniaturized Radiation Monitor for Continuous Dosimetry and Particle Identification in Space

**Speaker**

Mr Milan Malich

10:10–10:30

#### Pioneering use of Monolithic Active Pixel Sensors in space: the HEPD tracker on the CSES-02 satellite

**Speaker**

Roberto Iuppa

10:30

11:00

### Oral presentations: Lifetime

Session | Location: Online, Zoom | Convener: Christer Froejd

11:00–11:20

#### Radiation Damage Study of the ePix100 Detector at the European XFEL

**Speaker**

Ivana Klackova

11:20–11:40

#### Impact of X-ray induced radiation damage on FD-MAPS of the ARCADIA project

**Speaker**

Coralie Neubuser

11:40–12:00

#### TCAD numerical simulation of irradiated thin Low-Gain Avalanche Diodes

**Speaker**

Arianna Morozzi

12:00