Session Program

1–6 Oct 2023

TWEPP 2023 Topical Workshop on Electronics for Particle Physics

ASIC

Geremeas, Sardinia, Italy
Calaserena Village, Geremeas, Quartu S.Elena, Sardinia (Italy)

Monday 2 October

14:45

ASIC

Session | **Location:** Mistral Room | **Convener:** Angelo Rivetti

14:45–15:05

Performance of H2GCROC3, the readout ASIC of SiPMs for the back hadronic sections of the CMS High Granularity Calorimeter.

Speaker
Jose David Gonzalez Martinez

15:05–15:25

First test results for ECON-T and ECON-D ASICs for CMS HGCAL

Speaker
Cristina Ana Mantilla Suarez

15:25–15:45

Testing and characterisation of the prototype readout chip for the High-Luminosity LHC upgrade of the CMS Inner Tracker

Speaker
Michael Grippo

15:45

16:15

ASIC

Session | **Location:** Mistral Room | **Convener:** Ping Gui

16:15–16:35

Design and characterization of RD53C production chips for ATLAS and CMS pixel upgrades at HL-LHC

Speaker
Luca Pacher

16:35–16:55

Performance of the COLUTA ADC ASIC for the ATLAS HL-LHC Liquid Argon Calorimeter Readout

Speakers
Michael Himmelsbach, Michael Himmelsbach

16:55–17:15

Chips for calibration of the ATLAS LAr calorimeter

Speaker
Mr Ludovic Raux

17:15

Tuesday 3 October

09:00

ASIC

Session | **Location:** Mistral Room | **Convener:** Marcus Julian French

09:00–09:20

The Monolithic Stitched Sensor (MOSS) Prototype for the ALICE ITS3 and First Test Results

Speaker
Gianluca Aglieri Rinella

09:20–09:40

Validation of the 65 nm TPSCo CMOS imaging technology for the ALICE ITS3

Speaker
Chiara Ferrero

09:40–10:00

Development of monolithic pixel sensor prototypes for the CEPC vertex detector

Speaker
Wei Wei

10:00

11:20

ASIC

Session | **Location:** Mistral Room | **Convener:** David Gascon

11:20–11:40

Characterization of the ATLAS Liquid Argon Front-End ASIC ALFE2 for the HL-LHC upgrade

Speaker
Dimitrios Matakias

11:40–12:00

Design and characterization of sub-10ps TDC ASIC in 28nm CMOS technology for future 4D trackers

Speaker
Larry Lou Jr Ruckman

12:00–12:20

Recent developments in the IGNITE project on front-end design in CMOS 28-nm technology

Speaker
Sandro Cadeddu

12:20

15:20

ASIC

Session | **Location:** Mistral Room | **Convener:** Angelo Rivetti

15:20–15:40

Digital on Top methodology for Monolithic Active Pixel Sensor, feedback from MIMOSIS sensors for CBM Micro-Vertex Detector

Speaker
Frederic Morel

15:40–16:00
Tri-axis 5µm hexagon pixel-strip matrix combining 3*852 current comparator in a 180nm node

Speaker
Edouard Bechetoille

16:00–16:20
Lab measurement of UKRI-MPW0 after irradiation: an HV-CMOS prototype detector with a large breakdown voltage

Speaker
Chenfan Zhang

16:20

17:40

ASIC

Session | **Location:** Mistral Room | **Convener:** Ping Gui

17:40–18:00 **3D-integrated pixel circuit for a low power and small pitch SOI sensor**

Speaker
Yunpeng Lu

18:00–18:20 **NAPA-P1: NANOSECOND TIMING PIXEL FOR LARGE AREA SENSORS**

Speaker
Alexandre Habib

18:20

Wednesday 4 October

09:00

ASIC

Session | **Location:** Mistral Room | **Convener:** Adriano Lai

09:00–09:20

A low crosstalk 768-channel of 14-bit analog to digital converters for high resolution array of detectors.

Speaker
Dr Daniel Dzahini

09:20–09:40

Dual use driver for high speed links transmitters in the future high energy physics experiments

Speaker
Mateusz Karol Baszczyk

09:40–10:00 **SET sensitivity study of a VCRO-based PLL for HL-LHC ATLAS HGTD**

Speaker
Mr Maxime Morenas

10:00

11:20

ASIC

Session | **Location:** Mistral Room | **Convener:** Christine Guo Hu

11:20–11:40

Design and Characterization of a precision tunable time delay integrated circuit.

Speaker
Yahya Tousi

11:40–12:00 **In-pixel AI for lossy data compression at source for X-ray detectors**

Speaker
Danny Noonan

12:00–12:20

A simulation methodology for establishing IR-drop-induced clock jitter for high precision timing ASICs.

Speaker
Gianmario Bergamin

12:20