

Session Program

2-6 Dec 2024

2nd DRD3 week on Solid State Detectors R&D

WG2 - Hybrid silicon technologies

CERN, 500/1-001 - Main Auditorium

Monday 2 December

10:20

WG2 - Hybrid silicon technologies: WG2 - Hybrid silicon technologies

Session | **Location:** CERN, 500/1-001 - Main Auditorium | **Conveners:**
Martin Van Beuzekom, Anna Macchiolo, Alessandro Tricoli

10:20–10:35 Introduction

Speakers

Alessandro Tricoli, Anna Macchiolo, Martin Van Beuzekom

10:35–10:55

Preliminary results on 3D silicon sensors using femtosecond TCT-SPA and TPA-TCT techniques at ELI: Work in Progress

Speaker

Gordana Lastovicka Medin

10:55–11:15

On the properties of signal formation in LGAD sensors

Speaker

Nicolo Cartiglia

11:15–11:35

study of deep carbonated LGAD at IHEP

Speaker

Yuan Feng

11:35–11:55

Ghosty Ti-LGAD

Speaker

Ms Danijela Mrkic

11:55–12:15

First Irradiation Studies of the novel nLGAD Concept

Speaker

Veronika Kraus

12:15–12:30

ASIC Development for Timing Measurements using LGAD Sensors

Speaker

Abderrahmane Ghimouz

12:30–13:50

Lunch Break

13:50–14:10

Performance of AC-LGADs in radiation hard environment and non-standard charge depositio

Speaker

Dr Simone Michele Mazza

14:10–14:30

Research of AC-LGAD strip detector for 4D tracking

Speaker

Weiyi Sun

14:30–14:50

Update on the DC-coupled Resistive Silicon Detector for 4D tracking

Speaker

Roberta Arcidiacono

14:50–15:10

Impact of high deposited energy on Single Event Burnout in LGAD sensors**Speaker**

Dr Matthew Glenn Kurth

15:10–15:30

Characterization of Low Gain Avalanche Detector Gain by Means of the Transient Current Technique**Speaker**

Mohamed Hijas Mohamed Farook

15:30–16:00

Coffee Break

16:00–16:20

Controlled charge multiplication in thin small-pitch 3D pixel sensors**Speaker**

Andrew Donald Gentry

16:20–16:35

RD50 Common Fund Project - RD50-2023-03: Deep Junction LGAD**Speaker**

Dr Simone Michele Mazza

16:35–16:50

NEUROPIX: A neuromorphic computing framework for pixelated detector data processing**Speaker**

Mathieu Benoit

16:50–17:05

OPTIMA, a board dedicated to Optimized Precision Timing for Multichannel Acquisition**Speaker**

Federico De Benedetti

17:05–17:20

LGAD and 3D technology at the IMB-CNM**Speaker**

Neil Moffat

17:20–17:25

Summary of Proposed Projects in WG2**Speakers**

Alessandro Tricoli, Anna Macchiolo, Martin Van Beuzekom

17:25–18:00

WG2 - Discussion**Speakers**

Alessandro Tricoli, Anna Macchiolo, Martin Van Beuzekom

18:15