

## Session Program

29 June 2026 to 3 July 2026



## 5th DRD3 week on Solid State Detectors R&D

### ***WG3 (WP3)***

Institute of Space Science & National Institute of Materials Physics  
National Institute of Statistics

# Monday 29 June

09:15

## WG3 (WP3): Extreme fluence and radiation damage characterization

**Session** |

**Location:** Institute of Space Science & National Institute of Materials Physics, National Institute of Statistics |

**Conveners:** Ioana Pintilie, Dr Joern Schwandt

09:15-09:35 **HADES project - HARDness factor and DEFect studies in Silicon**

**Speaker**

Marie Christin Muehlnikel

09:35-09:55

**Infrared Spectroscopy on silicon samples irradiated with protons and neutrons up to extreme fluences**

**Speaker**

Faiza Rizwan

09:55-10:15

**Gain-Layer Project - current status of defect characterization after 1 MeV neutron irradiation**

**Speaker**

Ioana Pintilie

10:15-10:35

**Van der Pauw characterisation of acceptor and donor removal in LGAD gain implants**

**Speaker**

Alessandro Fondacci

10:35-10:55

**Updates on the PAB activities**

**Speaker**

Valentina Sola

10:55-11:15

**Partial Activation of Boron for Radiation-Hard LGADs: Production and electrical characterization**

**Speaker**

Syed Muhammad Abouzar Sarfraz

11:15-11:45

**Coffee break**

11:45-12:05

**Systematic Investigation of Acceptor Removal in HPK LGADs with Modified Gain Layers**

**Speaker**

Koji Nakamura

12:05-12:25

**Laser trap spectroscopy: Depth profiling of cluster formation inside irradiated PIN diode**

**Speakers**

Prof. Gordana Lastovicka Medin, Dr Rogelio Palomo Pinto

12:25-12:45

**Study of ionizing energy losses in silicon and silicon carbide sensors with Timepix3****Speaker**

Dr Radu-Emanuel Mihai

13:00

14:00

**WG3 (WP3): Extreme fluence and radiation damage characterization****Session** |**Location:** Institute of Space Science & National Institute of Materials Physics, National Institute of Statistics |**Conveners:** Ioana Pintilie, Dr Joern Schwandt

14:00-14:20

**Annealing behaviour of bulk radiation damage in CMS HGICAL silicon sensors for fluences from  $1e13$  to  $1.5e16$  neq/cm<sup>2</sup>****Speaker**

Ioanna Kalfa

14:20-14:40

**Radiation hardness of proton-irradiated LGADs for the ATLAS High Granularity Timing Detector****Speaker**

Iskra Velkovska

14:40-15:00

**The Long-term Electrical Characterisation of Irradiated HGICAL Silicon Sensors with Dedicated Annealing Steps****Speaker**

Ufuk Guney Tok

15:00-15:20

**Degradation of polysilicon bias resistors and loss of strip isolation at fluences beyond HL-LHC****Speaker**

Javier Fernandez-Tejero

15:20-15:40

**Effects of Microwave Annealing on Surface and Bulk Defects in Silicon Devices****Speaker**

Andrew Donald Gentry

15:40-16:00

**Coffee break**

16:00