

Eleventh International Workshop on Semiconductor Pixel Detectors for Particles and Imaging



lundi 18 novembre 2024 - vendredi 22 novembre 2024

Strasbourg

Programme Scientifique

High energy and nuclear physics experiments

Operation and performances of running pixel detectors, R&D on upgrade or future pixel detectors

Astrophysics applications

Application of pixel sensors in astronomy, astrophysics and/or in-space (balloons, satellite)

Applications in biology, medical imaging

Photon science applications

Radiation tolerance

Studies of radiation damage of running pixel detectors, R&D to reach higher radiation tolerance

Timing with pixels

Performance of running pixel detectors dedicated to 4D tracking or particle identification, R&D to improve time resolution of pixel sensors

Monolithic sensors

R&D on various monolithic technologies like: CMOS pixel sensors (MAPS), Silicon On Insulator (SOI), Depleted field effect transistors (DEPFET)

Sensing materials development

The topic includes a broad range of materials such as solid-state (diamond, SiC, organic, ...) or gaseous (liquid nobles, ...)

Electronics

Read-out ASICs, powering, data acquisition system, monitoring system

Integration in detection modules and structures

Mechanics, cooling, interconnection and assembly techniques