

Contribution ID: 1 Type: remote

ARCADIA: Fully Depleted CMOS MAPS technology

Monday 8 February 2021 12:00 (30 minutes)

ARCADIA is an INFN R&D Platform for the design, fabrication and system integration of fully-depleted CMOS monolithic sensors and associated electronics, firmware and software.

The Collaboration developed a novel sensor technology allowing for:

- Active sensor thickness in the range 50 μm to 500 μm or more;
- Operation in full depletion with fast charge collection only by drift;
- Small charge collecting electrode for optimal signal-to-noise ratio;
- Scalable readout architecture with ultra-low power capability;
- Compatibility with standard CMOS fabrication processes.

We will present the ongoing activities and future perspectives towards the use of the ARCADIA CMOS DMAPS technology on future HEP infrastructures.

Primary author: DA ROCHA ROLO, Manuel Dionisio (Universita e INFN Torino (IT))

Presenter: DA ROCHA ROLO, Manuel Dionisio (Universita e INFN Torino (IT))

Session Classification: Main session