## Course on semiconductor radiation detectors



Contribution ID: 44

Type: Contributed e-poster

## **Charge Sensitive Amplifiers with Bi- and Trilinear Signal Compression Feature for LGAD Detectors**

Thursday, 6 July 2023 16:35 (1h 25m)

This work is concerned with the design of Charge Sensitive Amplifiers (CSAs) featuring dynamic signal compression. Two different CSA variants have been developed to reach low-noise performance while dealing with signals covering more than three decades in dynamic range. The CSAs have been designed in a 65 nm CMOS technology as part of the front-end circuit for the readout of Low Gain Avalanche Diodes (LGADs) based particle detectors for the next generation of space-borne experiments.

Primary author: GIROLETTI, Simone (INFN - U. di Pavia)