



Contribution ID: 18

Type: Talk

The low-noise low-power multi-channel ASIC preamplifier of TRACE: design, results and perspectives

Thursday, 26 January 2017 14:15 (30 minutes)

In this talk the new ASIC preamplifier of TRACE is presented. The discussed topics will include the design philosophy, the experimental results and the foreseen perspectives. The first prototype realized in the end of 2014 has been extensively characterized, both with a pulser on the test-bench and with a detector prototype and an alpha source. With an overall power consumption of 12mW / channel, the ASIC's energy resolution is in the order of 1.1keV (best case ever 0.75keV).

Primary authors: PULLIA, Alberto (MI); MENGONI, Daniele (PD); CAPRA, Stefano (MI)

Presenter: CAPRA, Stefano (MI)

Session Classification: Electronics and Front-end electronics