3rd DRD3 week on Solid State Detectors R&D



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Type: WG2 - Hybrid silicon sensors

Technological developments and performance of n-type Low Gain Avalanche Detectors (nLGAD) at IMB-CNM

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Low Gain Avalanche Detectors built on high resistivity n-type substrates (nLGAD) have emerged as a suitable alternative to conventional p-type sensors for low penetrating radiation detection. The Radiation Detectors Group of the IMB-CNM has been exploring the potentialities of this technology since 2020, mainly working within the framework of the CERN's RD50 collaboration and several national and international projects. This contribution aims at summarizing the progress of the nLGAD technology in the IMB-CNM facilities, with an emphasis on the latest experimental results, as well as the technological challenges and the envisioned future developments and applications.

Type of presentation (in-person/online)

in-person presentation

Type of presentation (I. scientific results or II. project proposal)

I. Presentation on scientific results

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