3rd DRD3 week on Solid State Detectors R&D



Contribution ID: 60

Type: WG1 - Monolithic Sensors

Towards an OpenSource DMAPS project proposal

Tuesday 3 June 2025 11:30 (20 minutes)

Geopolitics suggest to consider technologies that Europe has full control of. One option to avoid sources that might potentially become unavailable is to focus on Open-Source chip design tools and processes that are hosted in Europe and provide OpenPDKs. While this has already been proven to work for fully digital workflows, there is still a lot of work to be done for mixed-signal chips in general and for DMAPS in particular. I will present initial steps taken with the OpenPDK for the IHP SG13G2 130nm SiGe process and outline ideas for a DRD3 common project to evaluate the EDA tools and ultimately submit and test a DMAPS chip using a fully Open-Source toolchain to demonstrate the ability to create a monolithic pixel detector without proprietary software and NDAs using a foundry based in Europe.

Type of presentation (in-person/online)

in-person presentation

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

II. Presentation on project proposal

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