CPAD 2025 at Penn



Contribution ID: 21 Type: Parallel session talk

Dual-sided Skipper-CCDs for sub-GeV dark matter searches

Wednesday 8 October 2025 14:00 (20 minutes)

Skipper-CCDs - finely segmented silicon detectors with the ability to count single charges - have been used by SENSEI and DAMIC-M for sub-GeV dark matter searches with world-leading sensitivity.

I will present the concept and projected performance of the dual-sided Skipper-CCD, a proposed detector that simultaneously reads out electrons and holes from the two sides of the device.

This will greatly improve background rejection for future large-scale CCD experiments such as Oscura.

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Session Classification: RDC 7 Low-Background Detectors

Track Classification: RDC 7 Low-Background Detectors