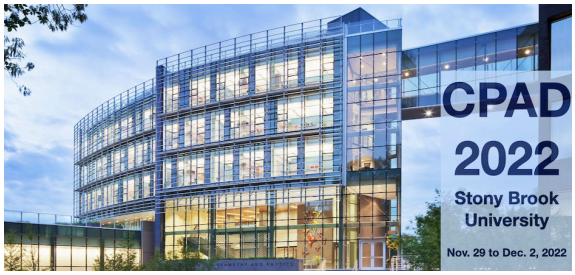

Contribution ID: **90** Type: **Contribution Talk**

Novel multi-channel skipper-CCD packages for the OSCURA experiment

Wednesday, 30 November 2022 09:10 (20 minutes)

The next generation of experiments for rare-event searches based on skipper Charge Coupled Devices (skipper-CCDs) will bring new challenges for the packaging and read-out of the detectors. Scaling the active mass and simultaneously reducing the experimental backgrounds in two orders of magnitude will require a novel high-density Silicon-based package, that must be massively produced and stored. In this work, we present the design, first production, and testing of a 16-channel Silicon package, along with the outlook for the next steps towards producing 1500 wafers that will add up to a 10 kg skipper-CCD detector.

Primary author: BOTTI, Ana Martina (FNAL)

Presenter: BOTTI, Ana Martina (FNAL)

Session Classification: WG7: Photon Detectors (incl. CCDs)

Track Classification: WG7: Photon Detectors (incl. CCDs)