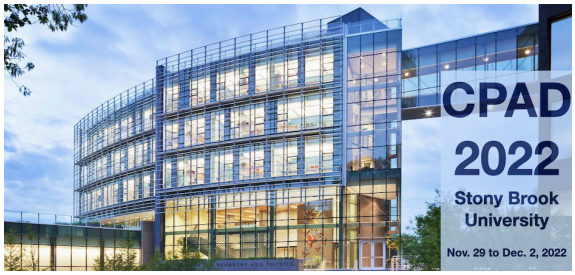

Contribution ID: **1** Type: **Contribution Talk**

Nano-CMOS photon imager

Wednesday, November 30, 2022 2:55 PM (20 minutes)

Overview of the "Co-design and integration of nano-sensors on CMOS" project of the Microelectronics Co-Design Research DOE program. This is a 3-year multi-disciplinary development. The aim is to produce a demonstrator device using a pixellated CMOS ASIC as a back end upon which nano-materials are deposited to achieve single photon detection at LN2 or higher temperature, with high quantum efficiency, low dark counts, and with spectral information for every photon. The concept for this device evolved out of work previously presented at CPAD: https://agenda.hep.wisc.edu/event/1391/contributions/6971/

Authors: NONAKA, Andy (LBNL); TIKHOMIROV, Grigory (UC Berkeley); Dr FRANÇOIS, Léonard (Sandia NL); GARCIA-SCIVERES, Maurice (LBNL); RAJA, Archana (LBNL); PAPADOPOULOU, Katerina (LBNL); YOUNG, Mi (LBNL); MEI, Yuan (LBNL)

Presenter: GARCIA-SCIVERES, Maurice (LBNL)

Session Classification: WG1: Solid State Detectors and ASICs

Track Classification: WG1: Solid State Detectors and ASICs