Contribution ID: 18 Type: Oral/Presentation

Silicon Photomultipliers in the CMS Upgrade

Tuesday 19 November 2024 10:14 (27 minutes)

Silicon Photomultipliers (SiPM) will be used extensively in the upgraded CMS detector at the Large Hadron Collider. SiPMs have already been implemented into the barrel and endcap hadron calorimeters as part of the Phase I upgrade, and hundreds of thousands of SiPMs will be used for two new Phase II subdetectors, the Barrel Timing Layer and the endcap high granularity hadronic calorimeter. We will discuss the motivation for SiPMs as the photodetectors of choice in CMS, the evolution of the SiPMs from Phase I to Phase II, and the particular challenges faced and overcome for each of the three subdetectors.

Do you need a VISA letter for traveling to Canada?

No

Author: WAYNE, Mitchell Ross (University of Notre Dame (US))

Co-authors: KARNEYEU, Anton (University of Notre Dame (US)); HEERING, Arjan (University of Notre Dame

(US)); MUSIENKO, Yuri (University of Notre Dame (US))

Presenter: WAYNE, Mitchell Ross (University of Notre Dame (US))

Session Classification: Colliders (1) (Chair: Paolo Agnes, Feng Shi)

Track Classification: Invited Talk