Contribution ID: **845** Type: **Poster**

Simulation study for the Electromagnetic Calorimeter Trigger system at the Belle II Experiment

Friday, July 6, 2018 8:15 PM (15 minutes)

The Belle II experiment at KEK in Japan start beam collision from early of 2018 to probe a New Physics beyond the Standard Model by measuring CP violation phenomena and rare decays of beauty, charm quark and tau lepton. The experiment is performed at the SuperKEKB e+e- collider with 80×10ˆ{34}cmˆ{−2}sˆ{−1} as an ultimate instantaneous luminosity. As a severe beam background environment is highly anticipated, a detail simulation study of the Belle II calorimeter trigger system is very crucial to operate Belle II trigger/DAQ system in stable. We report simulation results on various trigger logic and efficiencies using physics and beam background events upon the Belle II Geant4-based analysis framework called Basf2.

Primary authors: LEE, InSoo; CHEON, Byunggu; Mr KIM, SungHyun (Hanyang University); Mr KIM, CheolHun (Hanyang Univiersity); Mr CHO, HanEol (Hanyang University); Mr UNNO, Yuji (Hanyang University); Mr KIM, YoungJun (Korea University)

Presenter: LEE, InSoo

Session Classification: POSTER

Track Classification: Detector: R&D for Present and Future Facilities