

## RPC Background Simulations in the CMS Experiment at the HL-LHC

*Tuesday, 20 February 2018 11:20 (20 minutes)*

The high luminosity expected from the HL-LHC will be a challenge for the CMS detector. The increased rate of particles coming from the collisions and the radioactivity induced in the material of the detector could cause significant damage and could result in progressive degradation of its performance. Simulation studies are very useful in these scenarios as they allow one to study difficult radiation environments and the impact on the detectors. GEANT4 is used to study the sensitivity of the RPCs to different kinds of radiation particles as a function of their energy.

**Presenter:** CARPINTEYRO BERNARDINO, Severiano (Autonomous University of Puebla (MX))

**Session Classification:** Poster Session