



Type: **Parallel contribution** 

## Search for a heavy neutrino and right-handed W of the left-right symmetric model with CMS detector

Friday 12 August 2011 16:00 (20 minutes)

The left-right (LR) symmetric model explains the origin of the parity violation in weak interactions and predicts the existence of additional heavy right-handed W and Z' gauge bosons. In addition, heavy right-handed neutrino states arise naturally within the LR symmetric model. These neutrinos can be partners of light neutrino states, related to their non-zero masses through the see-saw mechanism. This makes the searches of heavy right-handed W and neutrino interesting and important. This talk is about the first search for signals from the heavy W and N production with the CMS Experiment at the LHC.

Primary author: PASTIKA, Nathaniel Joseph (School of Physics and Astronomy-University of Minnesota)

**Presenter:** PASTIKA, Nathaniel Joseph (School of Physics and Astronomy-University of Minnesota) **Session Classification:** Beyond the Standard Model

Track Classification: Beyond the Standard Model