Contribution ID: **209**

Type: **Talk in Parallel Session at DIS2013**

Searches for new heavy resonances and large extra dimensions at CMS

Thursday 25 April 2013 09:30 (20 minutes)

Additional heavy leptonic resonances (e.g. Z', W') are predicted by a number of new physics models. Models with extra dimensions include not only the possibility for resonant signatures like predicted in RS scenarios, but might also result in a non-resonant enhancement of high mass lepton pairs as suggested by the ADD model of large extra dimensions.

CMS has performed searches for both resonant and non-resonant signatures of new physics in the lepton mass spectra. Most of the presented results are based on the full 2012 dataset of proton-proton collisions at a center of mass energy of 8 TeV. No evidence for event contributions beyond the standard model is observed, and the results are interpreted in terms of limits on model parameters in the considered new physics scenarios.

Author: JEITLER, Manfred (Austrian Academy of Sciences (AT))

Presenter: SCHMITZ, Stefan Antonius (Rheinisch-Westfaelische Tech. Hoch. (DE))

Session Classification: WG3: Electroweak and Searches

Track Classification: Electroweak Physics and Beyond the Standard Model