



ID de Contribution: 53

Type: YSF (Young Scientists Forum)

## Dark Matter produced in association with top quark pair

*mardi 17 mars 2015 19:44 (5 minutes)*

LHC Search for Dark Matter produced in association with top quark pair is presented. The search is performed using  $19.7 \text{ fb}^{-1}$  of pp collisions recorded at a center of mass energy of 8 TeV with the CMS detector at LHC. The signature investigated is top quark pairs in semi-leptonic final state plus missing transverse energy. This work focuses in particular on Dark Matter production through scalar interaction where a proportionality to the quark mass is expected. This can enhance the discovery potential of the LHC under this assumption.

**Auteur principal:** Mlle PINNA, Deborah (University of Zurich)

**Orateur:** Mlle PINNA, Deborah (University of Zurich)

**Classification de Session:** Young Scientist Forum 2

**Classification de thématique:** Experiment