## Physics at LHC 2012



Contribution ID: 20 Type: Poster

## Search for long-lived massive particles at CMS

Monday 4 June 2012 16:00 (1 hour)

Several models of new physics, including split supersymmetry, predict the existence of a heavy particle, which is long-lived on the timescales of the bunch spacing of the Large Hadron Collider (LHC). Such a particle would be observable using the Compact Muon Solenoid (CMS) at the LHC, and although produced at high momentum, it would travel slowly due to its large mass. We describe a search for these particles, using the experimental techniques of time of flight and dE/dx measurement. Results are presented based on data recorded with CMS in 2011.

## <strong>E-mail Address</strong>

cooper@physics.umn.edu

<strong>Collaboration Name</strong><br /><font color="#000099">Please enter the name of<br />the collaboration or group<br />using the acronym, as in:<br /><font color="#ff0000">ABC Collaboration</font>

CMS Collaboration

Author: COOPER, Seth (School of Physics and Astronomy)
Presenter: COOPER, Seth (School of Physics and Astronomy)
Session Classification: 1D: Poster Session and Coffee Break

Track Classification: Standard Model & Beyond