



Contribution ID: 1113

Type: **Parallel Session Talk**

Di-photon, and Di-lepton Searches at the Tevatron

Saturday, 24 July 2010 17:35 (15 minutes)

We search for resonances in the invariant mass spectrum of two electromagnetic (EM) object from the decay of new Z' bosons or Randall-Sundrum gravitons to electron-positron and/or photon pairs at the Tevatron. In addition, various studies of collider and cosmological data have found multilepton sources that are not well described by the usual models. These studies have motivated a theory of a new $O(\text{GeV})$ force that interacts with standard-model particles only through a high-mass intermediary. This new 'dark' force could produce multiple leptons with small opening angles, dubbed 'lepton jets', at hadron colliders. We present a general search for low-mass muon pairs at high transverse momentum, with sensitivity to any new light resonance.

Primary authors: KREPS, Michal (CDF); D0, Physics Coordinators (D0); WRIGHT, Thomas (CDF)

Presenter: Dr HAYS, Christopher (University of Oxford)

Session Classification: 10 - Beyond the Standard Model (theory and experimental searches)

Track Classification: 10 - Beyond the Standard Model (theory and experimental searches)