Contribution ID: 20 Type: not specified

## Search for Anomalous Wtb Couplings in Single Top Quark Production at DØ

Thursday, 14 June 2012 09:15 (15 minutes)

The large mass of the top quark, close to the electroweak symmetry-breaking scale, makes it a good candidate for probing physics beyond the Standard Model, including possible anomalous couplings. We examine  $D\emptyset$ 's data to study the Lorentz structure of the Wtb coupling. The standard model predicts a left-handed vector coupling at the Wtb vertex. The most general lowest dimension, CP-conserving Lagrangian admits right-handed vector and left- or right-handed tensor couplings as well. We find that the data prefer the left-handed vector coupling and set upper limits on the anomalous couplings.

**Primary author:** Ms JOSHI, JYOTI (University of California, Riverside)

**Presenter:** Ms JOSHI, JYOTI (University of California, Riverside)

Session Classification: Morning Session