

# The Top-Quark Forward-Backward Asymmetry

*samedi 23 juillet 2011 11:00 (30 minutes)*

A theory review of the forward-backward anomaly observed in top-quark pair production at the Tevatron is presented. I discuss various attempts to explain the large forward-backward asymmetry by physics beyond the Standard Model model. Significant constraints arise from flavour and electroweak precision observables, as well as direct production of new particles at hadron colliders. A large top-quark asymmetry from proton-antiproton collisions is strongly correlated with the observation of a charge asymmetry and effects in the decay spectra of the top-antitop pair at the LHC.

**Auteur principal:** Dr WESTHOFF, Susanne (Mainz University)

**Orateur:** Dr WESTHOFF, Susanne (Mainz University)

**Classification de Session:** Top and Electroweak Physics

**Classification de thématique:** Top and Electroweak Physics