

# The Top Quark Forward Backward Asymmetry and Flavor

*Wednesday 13 April 2011 11:15 (25 minutes)*

We show that the forward-backward asymmetry in top quark pair production can be enhanced by fields that transform nontrivially under the flavour group and satisfy Minimal Flavour Violation, while at the same time the constraints from associated effects on the  $d\sigma(t\bar{t})/dM_{t\bar{t}}$  distribution, dijet resonance searches, same sign top pair production and other phenomenology are satisfied. We focus on the examples of a scalar color sextet field and a vector colour octet field that are also sextets and octets of flavor  $SU(3)_U$ , respectively.

**Author:** Prof. KAGAN, alexander (university of Cincinnati)

**Presenter:** Prof. KAGAN, alexander (university of Cincinnati)

**Session Classification:** Top 3