



Contribution ID: 399

Type: **not specified**

## Heavy Top Quark Production in the Bestest Little Higgs Model at the LHC

*Tuesday, August 30, 2011 11:45 AM (25 minutes)*

Traditional Little Higgs models suffer from two generic problems. The first is that it is difficult to generate a Higgs quartic coupling without violating custodial symmetry and the second is the existence of fine-tuning in the top sector. These problems are solved in the Bestest Little Higgs model, which is based on an  $SO(6) \times SO(6) / SO(6)$  coset space with a built-in custodial symmetry. A distinctive feature of this model is the existence of several top quark partners that are considerably lighter than in other Little Higgs models without T-Parity, leading to a more interesting collider phenomenology. In this talk, I explore the possibility that these top partners can be produced and discovered at the LHC.

**Presenter:** MOATS, Kenneth (Carleton University)

**Session Classification:** Parallel Session 5