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Search for a Heavy Exotic partner of the top quark with charge 5/3

Saturday 7 July 2012 18:00 (1 hour)

Presented is a study of searches for two exotic particles - a heavy top quark partner with a fractional charge of $5/3$, $T_{5/3}$, and its partner, the heavy B quark with charge $-1/3$. These particles decay to a top quark and a W boson, leading to very busy events with multi-leptons and multi-jets. Processes where same-sign dileptons are produced are considered. The backgrounds are predominantly from $t\bar{t}$, QCD multi-jets, Z +jets, $t\bar{t}WW$, $t\bar{t}W$ and multiple- W +jets production. A study using the data collected by the CMS detector at the LHC during 2011 has been performed.

Speakers

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Session Classification: Poster Session

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