

Search for fourth generation quarks with CMS

The new energy regime that becomes accessible at the LHC will allow to extend the search region for 4th generation of quarks and leptons beyond existing constraints. Two studies covering both the low-mass and high-mass b' search regions are performed. Using leading order cross section for b' production, we determine the significance expected for an observation at up to 1/fb data at $\sqrt{s} = 10$ TeV. In the absence of a discovery, 95\% confidence level exclusion limits are presented as well.

Author: KLIMA, Boaz (Fermi National Accelerator Lab. (Fermilab)-Unknown-Unknown)

Presenter: KLIMA, Boaz (Fermi National Accelerator Lab. (Fermilab)-Unknown-Unknown)

Track Classification: Beyond the Standard Model