

Searches for excited fermions at HERA

Saturday, July 18, 2009 12:00 PM (15 minutes)

Searches for excited electrons, excited neutrinos and excited quarks are performed using the full $e^\pm p$ data sample collected by the H1 experiment at HERA, corresponding to a total luminosity of 475 pb^{-1} . The electroweak decays of excited fermions into standard model fermions and γ , Z or W bosons are considered. No evidence for excited fermion production is found. Mass dependent exclusion limits on excited fermion production cross sections and on the ratio f/Λ of the coupling to the compositeness scale are derived within gauge mediated models.

Primary author: Mr ZHANG, Zhiqing (LAL Orsay)

Co-author: SCHMITT, Stefan (DESY)

Presenter: Mr ZHANG, Zhiqing (LAL Orsay)

Session Classification: III. Higgs and New Physics

Track Classification: Higgs and New Physics