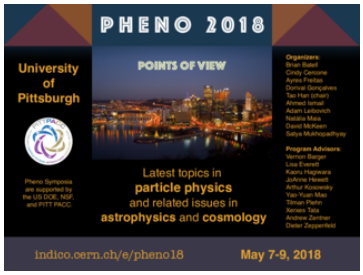

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Search prospects for b-associated Z' in the dimuon final state

Monday 7 May 2018 18:15 (15 minutes)

Hints for new physics beyond the standard model at the LHC are scarce. An exception are B-anomalies reported by LHCb in R_K and R_K* measurements, the latter two combining to a 4 sigma deviation from the SM.
A possible explanation of this excess might be a new heavy neutral gauge boson Z' with flavour-conserving couplings to second and third generation leptons, as well as third generation quarks, in addition to a flavour-violating b-s coupling. This talk presents search strategies and prospects for such a hypothetical particle in the dimuon channel within a Delphes study.

Summary

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