



Contribution ID: 55

Type: **Talk**

【324】 Search for long-lived Heavy Neutral Leptons in B-meson decays

Tuesday, June 28, 2022 5:45 PM (15 minutes)

The introduction of Heavy Neutral Leptons (HNLs) to the Standard Model (SM) would provide a possible explanation to the non-zero, yet small, mass of the SM neutrinos. The search for those particles is also motivated by the fact that, within certain theories, e.g the ν MSM, the HNLs would provide both a dark matter candidate as well as a possible mechanism for baryogenesis. A search for long-lived HNLs produced in B-meson decays, with the CMS experiment at CERN, is presented. The data comes from p-p collisions collected in 2018 using dedicated single muon triggers, corresponding to an integrated luminosity of 41.6 fb^{-1} .

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Session Classification: Nuclear, Particle- & Astrophysics

Track Classification: Nuclear, Particle- and Astrophysics (TASK)