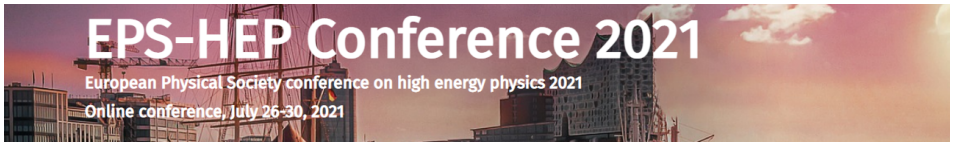

Contribution ID: **669** Type: **Parallel session talk**

Search for invisible decays at BESIII

Monday, 26 July 2021 14:15 (15 minutes)

BESIII has collected 448.2 M $\psi(3686)$ data set and 10 B J/ψ data set. The huge clean data sample provide an excellent chance to search for new physics. We report the search for decay $J/\psi \to \gamma + invisible$, which is predicted by next-to-minimal supersymmetric model. Without significant signal found, we gave around 6.2 times better upper limits than previous CLEO-c's results. In addition, we report the preliminary result of the first search for the invisible decay of Λ. This invisible decay is predicted by the mirror matter model which could explain the 4σ discrepancy in neutron lifetime measurement results from the beam method and bottle method.

Collaboration / Activity

BESIII

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