

Search for invisible decays at BESIII

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BESIII has collected data sets of 448.2 M $\psi(3686)$ events and 10 B J/ψ events. The huge clean data samples provide an excellent opportunity to search for new physics. We report the search for decay $J/\psi \rightarrow \gamma + \text{invisible}$, which is predicted by next-to-minimal supersymmetric model. Without significant signal found, we gave around 6.2 times better UL 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 mirror matter model which could explain the 4σ discrepancy in neutron lifetime measurement results between the beam method and the bottle method.

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