Contribution ID: **1** Type: **not specified**

Dark Sector Physics with Belle II

The Belle II experiment at the SuperKEKB energy-asymmetric e^+e^- collider is a substantial upgrade of the B factory facility at the Japanese KEK laboratory. The design luminosity of the machine is 8×10^{35} cm^{-2}s^{-1} and the Belle II experiment aims to record 50 ab^{-1} of data, a factor of 50 more than its predecessor. From February to July 2018, the machine has completed a commissioning run, achieved a peak luminosity of 5.5×10^{33} cm^{-2}s^{-1}, and Belle II has recorded a data sample of about 0.5 fb^{-1}. Main operation of SuperKEKB has started in March 2019 and about 10 fb $^{-1}$ integrated luminosity is expected by the end of June. This early data set, with specifically designed triggers, already offers the possibility to search for a large variety of dark sector particles in the GeV mass range complementary to LHC and dedicated low energy experiments; these searches will benefit from more data in the process of being accumulated. This talk will review the state of the dark sector searches at Belle II with a focus on the discovery potential of the early data, and show the first results

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Session Classification: Plenaries