

## Dark Sector Physics with Belle II

*Friday, 1 September 2017 16:30 (25 minutes)*

The next-generation B-factory experiment Belle II at the upgraded KEKB accelerator, SuperKEKB, will start physics data taking in 2018. It is an asymmetric  $e^+e^-$  collider that will operate with 40x the instantaneous luminosity of KEKB/Belle and aims to collect 50 times more data in total.

Belle II 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 profit both from the very large dataset that will be acquired by the Belle II experiment, and from specifically designed triggers for the early running of Belle II. This talk will review planned dark sector searches with a focus on the discovery potential of the first data.

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