Hilary Term 2021 Seminars



Contribution ID: 5 Type: **not specified**

The SuperKEKB Collider

Thursday 18 February 2021 16:15 (1 hour)

SuperKEKB is an asymmetric energy collider, colliding a 4 GeV positron beam with a 7 GeV electron beam at the KEK Tsukuba campus. It has been built to search for new physics beyond the standard model of the particle physics in the B meson regime. The SuperKEKB collider has been designed to achieve a luminosity that is more than an order of magnitude higher than the KEKB collider. It achieves this by employing a nanobeam scheme originally proposed by P. Raimondi for the SuperB collider. In this talk, the key architecture of the upgrade from KEKB to SuperKEKB will be shown, as well as the challenges currently faced by researchers in order to achieve higher luminosities.

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