

## The SuperKEKB Accelerator

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### Abstract:

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 nano-beam 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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