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Type: **Talk**

The Belle II experiment: status and prospect

Friday 2 October 2020 12:30 (30 minutes)

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 $8 \times 10^{35} \text{ cm}^{-2}\text{s}^{-1}$ and the Belle II experiment aims to record 50 ab^{-1} of data, a factor of 50 more than its predecessor. With this data set, Belle II will be able to measure the Cabibbo-Kobayashi-Maskawa (CKM) matrix, the matrix elements and their phases, with unprecedented precision and explore flavor physics with B and charmed mesons, and τ leptons. Belle II has also a unique capability to search for low mass dark matter and low mass mediators. We also expect exciting results in quarkonium physics with Belle II. In this presentation, we will review the status of the Belle II detector, the results of the planned measurements with the full available Belle II data set, and the prospects for physics at Belle II.

Is this abstract from experiment?

Yes

Is the speaker for that presentation defined?

Yes

Name of experiment and experimental site

Belle II

Internet talk

Details

The talk will be presented by Prof. Jerome Baudot from Hubert Curien Pluridisciplinary Institute , Strasbourg, France (WEB page <http://www.iphc.cnrs.fr/>)

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