



Contribution ID: 22

Type: **Talk**

Belle II Vertex Detector Performance

Monday 14 October 2019 17:30 (22 minutes)

The Belle II experiment at the SuperKEKB accelerator (KEK, Tsukuba, Japan) collected the first physics data in the spring 2019. With the aim to accumulate 50 times larger data sample from electron-positron collisions than the previous generation of B-Factories, both the collider and detector are facing substantial challenges, requiring not only state-of-the art hardware, but also modern software methods from track finding algorithms to alignment. The broad physics program and namely precision measurements in the field of time-dependent CP-violation, require excellent performance of the detector and in particular its vertexing device, designed as two layers of DEPFET pixels and four layers of double sided strip sensors. In this contribution, an overview of the vertex detector of Belle II, our methods to ensure its high performance and the first results and experiences from the first physics run will be presented.

Primary authors: BILKA, Tadeas (Charles University (CZ)); BELLE II PXD + SVD COLL.

Presenter: BILKA, Tadeas (Charles University (CZ))

Session Classification: Large detectors