



Contribution ID: 475

Type: **Presentation**

## Overview of the CEPC Vertex Detector

*Monday, 31 July 2017 11:21 (18 minutes)*

The Circular Electron Positron Collider (CEPC) has been proposed to measure with unprecedented precision the Higgs properties as well as the electroweak parameters. Its vertex detector that will be located as close as possible to the interaction point, must be built with state-of-the-art pixel detector technologies. In the presentation, performance requirements including single point resolution, readout time, and radiation hardness against total ionization dose (TID) and non-ionization energy loss (NIEL) will be explained. Potential candidate technologies and their R&D progress will be discussed together with the detector layout optimization. In addition, a preliminary design of the complicated interaction, which has dramatical impacts on the vertex detector will be also presented

**Primary author:** Dr ZHU, Hongbo (Institute of High Energy Physics)

**Presenter:** Dr ZHU, Hongbo (Institute of High Energy Physics)

**Session Classification:** Particle Detectors

**Track Classification:** Particle Detectors