

Development and beamtest of the CEPC scintillator-steel HCAL prototype

A highly granular hadronic calorimeter with scintillator tiles as active material and stainless steel as absorber is proposed based on the particle flow algorithm to address major challenges from precision measurements of jets at the future lepton colliders, such as the Circular Electron Positron Collider (CEPC). A large-scale HCAL prototype with 40 longitudinal layers and 13000 readout channels has been constructed and will be tested with high energy beam particles at CERN SPS in October 2022. This talk will present the highlights of the prototype development and commissioning and preparations for the CERN beam test. Possibly some first results from the beamtest may also be possibly shown.

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Session Classification: Calorimeter