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The IDEA drift chamber at FCC-ee and CEPC

The FCC program at CERN and the CEPC project in China combine in the same 100km infrastructure a high luminosity Higgs and Electroweak factory e+e- collider,
followed by a 100 TeV hadron collider. The IDEA project, as proposal for an experiment along then electron-positron collider, includes an ultralight
drift chamber as the main tracking device designed to provide efficient tracking, high precision momentum measurement
and excellent particle identification. One of most relevant feature of this drift chamber, fundamental for precision electroweak
physics at the Z pole and flavour physics, is the high transparency, in terms of radiation
lengths, obtained by using a novel approach adopted for the wiring and assembly procedures.
Particle identification capabilities are also particularly relevant for heavy flavour tagging and are reached by using a
cluster counting technique, expected to provide a two-times better particle separation with respect to the traditional method
based on energy loss per unit length. An overview of the status of the IDEA drift chamber project is provided in this talk,
together with the latest achievements while exploring the cluster counting technique at beam test facilities at CERN.

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