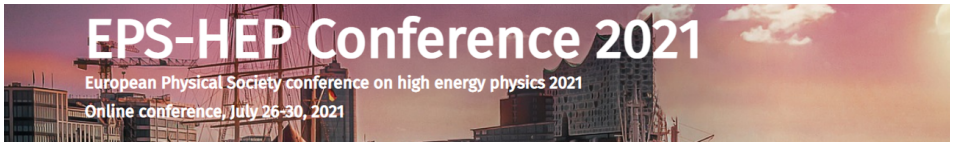

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The challenges of beam polarization and sub-MeV scale center-of-mass energy calibration at the FCC-ee

The capability to determine the FCC-ee centre-of-mass energies (ECM) at the ppm level using resonant depolarization (RD) of the beams is essential for the Z line shape measurements, the W mass and the possible observation of the Higgs boson s-channel production.
A first analysis (arXiv:1909.12245) demonstrated the feasibility of this programme for the runs at the Z pole and at the W pair threshold, conditional to careful preparation and a number of further developments. These results are recalled. The particular energy monitoring issues related to the possible run at ECM = mHiggs are considered for the first time. Upcoming challenges towards the ESPP-recommended feasibility study are presented.

Collaboration / Activity

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