

A common eh/hh interaction region and detector for the LHC

Thursday 5 May 2022 09:20 (20 minutes)

In this talk we present initial accelerator considerations on a common IR to be built which alternately could serve eh and hh collisions at the HL-LHC, while other experiments would stay on hh in either condition [1]. A forward-backward symmetrised option of the LHeC detector is sketched which would permit extending the LHeC physics programme to also include aspects of hadron-hadron and heavy ion physics.

[1] K. D. J. Andre et al., An experiment for electron-hadron scattering at the LHC, Eur. Phys. J. C 82 (2022) 1, 40, e-Print: 2201.02436 [hep-ex].

Submitted on behalf of a Collaboration?

Yes

Authors: ARMESTO PEREZ, Nestor (Universidade de Santiago de Compostela (ES)); ANDRE, Kevin Daniel Joel (CERN)

Presenter: ANDRE, Kevin Daniel Joel (CERN)

Session Classification: WG6: Future Experiments