"High energy $\gamma\gamma$ interactions at the LHeC"

Saturday 20 July 2024 09:57 (18 minutes)

The future collider LHeC is set to operate at a center-of-mass energy of 1.2 TeV and is anticipated to provide an integrated electron-proton luminosity of about 1 ab⁻¹. This talk will present a comprehensive survey of possible studies of high-energy photon-photon processes at the LHeC, for the $\gamma\gamma$ center-of-mass energy of up to 1°TeV. The scientific potential of studying such photon-photon interactions is evaluated for various $\gamma\gamma$ processes, including, in particular, the exclusive production of pairs of W and Z bosons, lepton pairs, Higgs bosons as well as pairs of charged supersymmetric particles.

Alternate track

1. Beyond the Standard Model

I read the instructions above

Yes

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