

Dark matter detection at future lepton colliders

Tuesday, 4 August 2020 14:00 (20 minutes)

Future lepton colliders are now intensively discussed around the world, and we have so far four proposals of the colliders; one from Asia (ILC and CEPC) and the other from Europe (FCC-ee and CLIC). The main goal of the colliders at the first stage ($\sqrt{s} = 240\text{-}250$ GeV) is to precisely measure known Higgs couplings to tackle the problem of the electroweak symmetry breaking. On the other hand, it is also interesting to discuss whether other new physics signals, in particular dark matter's, can be detected or not. In this talk, I would like to talk about how important roles future lepton colliders can play to detect dark matter.

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