

## $(g - 2)_\mu$ and SUSY Dark Matter at ILC/CLIC

*Thursday, 12 October 2023 15:00 (16 minutes)*

We analyze the electroweak (EW) sector of the MSSM in view of the experimental results for the anomalous magnetic moment of the muon,  $(g - 2)_\mu$ , the Dark Matter (DM) relic density, the DM direct detection (DD) bounds and in particular the LHC searches for such EW particles. We demonstrate the complementarity of future DD experiments and future high-energy  $e^+e^-$  colliders. We show that these two types of experiments will either find evidence for BSM particles or rule out the MSSM as an explanation for  $(g - 2)_\mu$  and DM.

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