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## Non-perturbative Effects on Electroweakly Interacting Massive Particles at Collider

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Electroweakly Interacting Massive Particles (EWIMP) is one of the best dark matter candidates as represented by Wino or Higgsino in SUSY. There are several methods to search for such particles at collider, and one of them is using indirect probe, which is as follows. EWIMP modifies the self energy of electroweak gauge bosons via loop contribution, and this result in a slight change in the cross section of the standard model (SM) Drell-Yan process. By comparing the SM prediction of Drell-Yan process and experimental result, we can search for EWIMP indirectly. It is known that this effect becomes maximal when EWIMP mass is the half of center-of-mass energy from 1-loop level calculation, also we pointed out higher order calculation and non-perturbative effects are important in such a energy region.

### Time Zone

Asia/Pacific

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