



ASPECTS OF DARK MATTER SEARCH AT COLLIDERS

DR. JAYITA LAHIRI

University of Hamburg, Germany



ABSTRACT

I will discuss various aspects of dark matter search at collider experiments. The tell-tale signature of a WIMP-like DM is large missing transverse momenta (MET) in the final state. I will briefly discuss the prospects of having such signals in two-Higgs doublet Models. In this regard, we have employed machine learning techniques such as ANN, to enhance signal over background. I further discuss the prospect of detecting multi-component dark matter at future lepton colliders. Finally, I also discuss a scenario, namely co-scattering dark matter, which deviates from the standard WIMP-like scenario and its prospect of discovery in the long-lived particle search

VENUE

PAMU Seminar Room

A.N. Kolmogorov Building,
ISI, Kolkata

DATE & TIME

23 August, 2024
03:00 PM



Everyone is invited to attend