Phenomenology 2025 Symposium



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Spin-Dependent Dark Matter Rates from Neutron Scattering

Monday 19 May 2025 17:15 (15 minutes)

For many spin-dependent dark matter-electron couplings, the DM's scattering rate in a target material can be written in terms of its dynamical magnetic susceptibility. This quantity can be inferred from neutron scattering data, without requiring a microscopic model of the material. As a proof of principle, I will show that an existing dataset can be used to find the DM scattering rate in yttrium iron garnet.

Mini Symposia (Invited Talks Only)

Plenary (Invited talks only)

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