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The Hunt for Physics Beyond the Standard Model at the Precision Frontier

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The best way to search for the physics beyond the Standard Model (SM) is by using a diverse set of probes - not just at the energy and the cosmic frontiers, but also the low-energy measurements relying on high precision and high luminosity. Precision tests of the SM, using parity-violating (PV) interaction, gives us possibility to reach the TeV scale, which is complimentary to the LHC searches for the possible extensions of the SM. High precision PV measurements could indirectly point out to the new physics particles if any inconsistency is found between experimental and theoretical results.

The talk will review and outline latest advances in precision PV searches for the physics beyond the SM and concentrate on how new physics particles (such as Z'or dark photon) influence PV observables.

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