

# New searches on parity and time-reversal symmetry violating quantities or interactions

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Wednesday, October 2 ♦ 4 P.M.

Room 118 Nieuwland Science Hall

Refreshments @ 3:30 in 202 NSH

Quantities or interactions which violate parity (P) and time-reversal (T) symmetries are usually sensitive to new physics beyond the Standard Model of particle physics. Direct searches for T-violating quantities are also promising in revealing new sources of charge conjugation and parity (CP) symmetry violation. The current understanding of the baryogenesis suggests that other sources of CP violation might exist in nature beyond the Standard Model and beyond what have been observed so far. In this talk, I will discuss two experiments concerning such direct searches: the neutron electric dipole moment and a tabletop experiment looking for spin-dependent short-range forces. In the latter case, I will present the latest limits from our work and future prospects.