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An Effective-Field-Theory Analysis of Low-energy Parity Violation in the NN System¹

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At low energies, parity violation in NN scattering (including photons) is described by an effective field theory (EFT) that includes only contact interactions. I will discuss this EFT, and its application to observables that would be zero in the absence of parity violation: longitudinal asymmetries in polarized nucleon-nucleon scattering, and asymmetries arising from polarized $\vec{n}p \rightarrow d\gamma$ and $np \rightarrow d\vec{\gamma}$.

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