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Lattice calculation of nuclear magnetic moments

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We present calculations of nuclear magnetic moments for light nuclei and aluminum isotopes using nuclear lattice effective field theory with the N3LO chiral interaction. Both one- and two-body electromagnetic current effects are included in the calculations. For all nuclei considered, the lattice results are generally consistent with experimental data. We find that the contribution from two-body currents is relatively small, typically below 10%. However, for magnetic moments of certain nuclei, nuclear structure effects play a significant role

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