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Three Relativistic Spinning Particles in a Box

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We generalize the relativistic field-theoretic (RFT) three-particle finite-volume formalism to systems of three identical, massive, spin-1/2 fermions, such as three neutrons. This allows, in principle, for the determination of the three-neutron interaction from the finite-volume spectrum of three-neutron states, which can be obtained from lattice QCD calculations.

Topical area

Hadronic and Nuclear Spectrum and Interactions

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