The role of spin in $n-\bar{n}$ transformations

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Abstract

The observation of the transformation of a neutron into an antineutron would reveal that B-L symmetry is broken and thus that dynamics beyond the Standard Model exists. Notably it would establish that neutrons can act as their own antiparticles, making the process a hadronic analog to neutrinoless double beta decay. I will discuss the role of spin, highlighting how external fields or sources can help mediate the effect.

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