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## Distinguishing Dirac vs Majorana Neutrinos at $\text{CE}\nu\text{NS}$ experiments

*Monday 26 July 2021 11:40 (20 minutes)*

Coherent Elastic Neutrino Nucleus Scattering ( $\text{CE}\nu\text{NS}$ ) provide a novel window to probe new physics connected with the well established non-vanishing neutrino masses. In this talk we will discuss how in the presence of a transition magnetic moment of neutrinos the  $\text{CE}\nu\text{NS}$  experiments have the potential to shed light on the nature of neutrinos: Dirac vs Majorana. In particular, we will take the NUCLEUS experiment as an example to demonstrate that through a study of differential energy distribution of the final states the  $\text{CE}\nu\text{NS}$  experiments can potentially achieve such a feat.

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### Collaboration / Activity

none

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