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Optimizing Energy Reconstruction for nEXO

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The nEXO experiment is a planned five-tonne liquid xenon time projection chamber to search for the neutrinoless double beta decay of ^{136}Xe with a projected half-life sensitivity of 1.35×10^{28} years. To achieve optimal energy resolution in nEXO, charge and light signals must be reconstructed to sufficient precision. For charge signals, this requires accurately modelling and correcting for the effects of diffusion across the drift region; for light, the position-dependent photon transport efficiency must be well-calibrated. In this talk I will present efforts currently underway to address both of these aspects of energy reconstruction.

Submitted on behalf of a Collaboration?

Yes

Author: Mr HARDY, Clarke (Stanford University)

Presenter: Mr HARDY, Clarke (Stanford University)

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