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Noble Element Simulation Technique

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The Noble Element Simulation Technique (NEST) is a C++ package with optional GEANT4 integration and a Python equivalent (nestpy) developed for liquid noble gases experiments. It is capable of accurate predictions of scintillation and ionization signal from different particles for a large range of drift fields in liquid xenon and argon and is widely used by leading dark matter and neutrino experiments. Using a combination of empirical and first principle methods, NEST models the intrinsic physics of noble detectors while maintaining a user-friendly format. Applicability, adaptability and future plans of NEST will be discussed.

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