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# The Noble Element Simulation Technique v2

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The Noble Element Simulation Technique (NEST) software package provides a method for calculating light and ionization yields in noble element-based detectors. Since its introduction in 2011, results from various experiments have enabled improvements to NEST's underlying models. This talk introduces NEST2, a new version that implements these upgraded models, along with software improvements for better functionality and accessibility. This talk validates NEST2 against several experiments and highlights its usefulness for optimizing detector design and operations. NEST2 will soon be available with a variety of interaction types in xenon, for recoils from 0.1-5,000 keV and electric fields from 0-5,000 V/cm.

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