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Effective operators for neutrinoless double beta decay[1] MIHAI HOROI, Department of Physics, Central Michigan University, Mount Pleasant, MI 48859, USA — Neutrinoless double-beta decay, if observed, would signal physics beyond the Standard Model. Guiding and analyzing the eventual neutrinoless double beta decay observations require accurate nuclear matrix elements (NME). The present status of the NME calculations indicates large discrepancies between the results of different nuclear structure models, and significant uncertainties within each model due to ingredients such as the size of the single particle space, the nuclear Hamiltonian, the choice of short range correlations, etc. In my talk I will discuss these discrepancies and uncertainties, and I will show some steps towards reducing them using effective operators.

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