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Reducing nuclear data uncertainties using differential and integral experimental data

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The current nuclear data uncertainties observed in some reactor parameters for some nuclides, calls for safety concern especially with respect to the design of GEN-IV reactors and should therefore be reduced further. In this paper, we present two approaches for incorporating differential experimental data and criticality benchmark information into the Total Monte Carlo methodology for reducing these uncertainties. These methods have been applied to the European Lead Cooled Training Reactor (ELECTRA).

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