Abstract Submitted
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Operator evolution for knock-out processes[1] SUSHANT MORE, SEBASTIAN KÖNIG, RICHARD FURNSTAHL, Ohio State Univ - Columbus, KAI HEBELER, Institut für Kernphysik, Technische Universität Darmstadt, 64289 Darmstadt, Germany — Renormalization group (RG) methods are used to soften nuclear Hamiltonians and obtain accelerated convergence in nuclear structure calculations. Use of soft Hamiltonians in nuclear reaction calculations pose an apparent challenge, because of the need to consistently transform the operator. We build on our recent work where we showed that effect of operator evolution depends on kinematics. We demonstrate that the RG changes to the operator can be explained from effective field theory principles. We also show that the RG perspective helps us understand the high-momentum factorization of experimental observables.

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