

Abstract Submitted
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Evolution of Nuclear Many-Body Forces with the Similarity Renormalization Group¹ ERIC JURGENSON, Ohio State Univ., PETR NAVRATIL, Lawrence Livermore Natl Lab, RICHARD FURNSTAHL, Ohio State Univ. — The first practical method to evolve many-body nuclear forces to softened form using the Similarity Renormalization Group (SRG) in a harmonic oscillator basis is demonstrated. When applied to 4He calculations, the two- and three-body oscillator matrix elements yield rapid convergence of the ground-state energy with a small net contribution of the induced four-body force.

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Eric Jurgenson
Ohio State University

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