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Eigenvector Continuation Emulators for NN Scattering¹ A.J. GARCIA, R.J. FURNSTAHL, P.J. MILLICAN, XILIN ZHANG, Ohio State Univ - Columbus — The computational expense of full uncertainty quantification for low-energy nuclear calculations motivates the development of emulators. Recent work has shown that eigenvector continuation (EC) can be used to build efficient emulators for both bound state and scattering observables. EC is a variational technique that uses eigensolutions for several sets of known parameters to form a basis that can be used to accurately interpolate and extrapolate solutions for the same Hamiltonian with different parameters. Here we apply and test EC for the nucleon-nucleon (NN) scattering problem using a variety of chiral effective field theory potentials formulated in both coordinate and momentum space.

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