

Abstract Submitted
for the HAW14 Meeting of
The American Physical Society

Optimized two- and three-nucleon forces at next-to-next-to leading order ANDREAS EKSTROM¹, Univ of Oslo — In this talk I will present recent developments in optimizing interactions from chiral effective field theory and their impact on nuclear structure calculations. In particular I will demonstrate the importance of simultaneously optimizing nucleon-nucleon and three-nucleon forces at next-to-next-to leading order. The importance of uncertainty quantification and sensitivity analysis in nuclear modeling have been acknowledged recently. Therefore, I will address the extraction of statistical uncertainties of the low-energy coupling constants and the subsequent error propagation to heavier nuclei.

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Date submitted: 24 Jun 2014

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