

James P. Vary

Iowa State University

Title

Ab initio No-Core Shell Model: Advances and Quantum Computing Advantage

Abstract

I first introduce the ab initio NCSM and review some of the recent advances including applications to nuclei in the sd-shell. I then discuss the rapidly developing field of Quantum Computing, define Quantum Advantage for ab initio nuclear theory and present the case for Quantum Advantage with ^{32}Mg in large basis basis spaces.