

Abstract Submitted
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Light nuclei without a core¹ PIETER MARIS, Dept. of Physics and Astronomy, Iowa State University, Ames, IA 50011, ANDREY SHIROKOV, Skobel'tsyn Institute of Nuclear Physics, Moscow State University, Moscow, 119991 Russia, JAMES VARY, Dept. of Physics and Astronomy, Iowa State University, Ames, IA 50011 — We report on recent progress in ab initio no-core full configuration basis calculations. We present results for the ground state energy and spectrum for the low-lying states of nuclei up to $A = 14$ using a realistic NN interaction, JISP16. Our spectra are in reasonable agreement with available experimental data. In addition to the energies, we also calculate selected observables such as rms radii and quadrupole moments.

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