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Electromagnetic transitions in $A \leq 10$ nuclei including two-body χEFT currents[1] SAORI PASTORE, Department of Physics and Astronomy, University of South Carolina, Columbia, SC 29208, STEVEN C. PIEPER, Physics Division, Argonne National Laboratory, Argonne, Illinois 60439, ROCCO SCHIAVILLA, Theory Center, Jefferson Laboratory, Newport News, Virginia 23606, ROBERT B. WIRINGA, Physics Division, Argonne National Laboratory, Argonne, Illinois 60439
— Recently, we presented ab initio quantum Monte Carlo calculations of magnetic moments and M1 transitions in A $\leq$ 9 nuclei, which include two-body chiral effective field theory meson exchange current contributions. The latter are found to always improve the theoretical predictions leading to a very good agreement with the experimental data. Here, we report on a preliminary study, carried out within the same framework, of electroweak transitions in additional A = 8 and A = 10 nuclear systems, with emphasis on transitions involving the isospin mixed states in ^{8}Be at $\sim$16 MeV.

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