Abstract Submitted
for the DNP15 Meeting of
The American Physical Society

Electromagnetic structure of light nuclei SAORI PASTORE, Univ of
South Carolina — I present a number of *ab initio* Quantum Monte Carlo calculations
of electromagnetic observables for $A \leq 10$ nuclei, which account for two-body effects
due to the coupling of external photons with pairs of interacting nucleons. Nuclear
wave functions are generated from a nuclear Hamiltonian with the Argonne v18
two-nucleon and Illinois-7 three-nucleon potentials, while chiral effective field theory
is utilized to construct the two-body electromagnetic current operators. Emphasis
is on recent calculations of magnetic radii and Zemach moments of light nuclei.

Saori Pastore
Univ of South Carolina

Date submitted: 24 Jun 2015   Electronic form version 1.4