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Electromagnetic structure of A=2 and 3 nuclei in chiral effective field theory MARIA PIARULLI, Old Dominion University — The objective of this presentation is to provide a complete set of χ EFT predictions for the structure functions and tensor polarization of the deuteron, for the charge and magnetic form factors of ³He and ³H, and for the charge and magnetic radii of these few-nucleon systems. The calculations use wave functions derived from high-order chiral twoand three-nucleon potentials and Monte Carlo methods to evaluate the relevant matrix elements. Predictions based on conventional potentials in combination with χ EFT charge and current operators are also presented. There is excellent agreement between theory and experiment for all these observables for momentum transfers up to $q \leq 2.0 - 2.5$ fm⁻¹.

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