Nuclear Electromagnetic Currents in Chiral Effective Field Theory

SAORI PASTORE, ANL — We have derived nuclear electromagnetic currents in chiral effective field theory with pions and nucleons as explicit degrees of freedom. The calculation has been carried out in time-ordered perturbation theory up to include N^3LO corrections, consisting of two–pion exchange, and contact contributions. Here I will present our calculation and discuss the results obtained for a number of electromagnetic observables of $A \leq 4$ nuclei.