

Abstract Submitted  
for the APR14 Meeting of  
The American Physical Society

**Nuclear Axial Currents in Chiral Effective Field Theory**

ALESSANDRO BARONI, Department of Physics, Old Dominion University — We present a progress report on the derivation of the nuclear axial current in time-ordered perturbation theory within a chiral-effective-field-theory framework with pions and nucleons as explicit degrees of freedom. The calculation has been carried out up to one loop by including one- pion-exchange, two-pion-exchange and contact terms. Nonstatic corrections to the axial current are included. Dimensional regularization has been used to renormalize pion-loop corrections.

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Date submitted: 19 Feb 2014

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