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Sommario/riassunto	This thesis presents a consistent application of chiral effective field theory (EFT) interactions and currents to obtain ab initio results for light nuclei magnetic dipole and Gamow-Teller strengths in light nuclei (A17). Recent results have demonstrated the importance of chiral EFT corrections for correctly predicting magnetic dipole and Gamow-Teller strengths in nuclei. However, these studies have not consistently applied the same treatment to these operators as is applied to the interaction. In this work, it is found that the inclusion of chiral EFT corrections to the magnetic dipole and Gamow-Teller operators generally brings the calculated results closer to agreement with

experiment. However, this work also demonstrates that the convergence of the solution to the many-body problem still poses substantial difficulties. This work has confirmed that the inclusion of chiral EFT corrections is necessary to describe light nuclei, while concluding that higher-order corrections are necessary in order to obtain good agreement with experimental data.
