

Low-energy neutrino and other weak reactions in nuclei

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Chiral symmetry allows a systematic construction of a low-energy effective Lagrangian, that enables a consistent and controlled description of static and dynamic properties of nuclei. I will discuss recent work, which starts from this consistency of currents and forces in chiral effective field theory, and leads to better description of nuclear forces, beta decays, and rare reactions. This opens a rainbow of opportunities, from checking the limits of the standard model to describing the micro-physics of astrophysical phenomena.