

Recent Developments in β decay studies within the Nuclear Shell Model

mercoledì 11 ottobre 2023 11:40 (20 minuti)

The necessity of calculating reliable nuclear matrix elements for neutrinoless double β decay has further stimulated the research on the mechanisms responsible for the renormalization of the β -decay operator. We tackle this point using the many-body perturbation theory to derive effective Hamiltonian and operators for nuclear shell model calculations. Here, I will present recent results obtained for medium-mass nuclei, discussing the effect of the renormalization for both allowed and forbidden β -decay transitions.

Autore principale: DE GREGORIO, Giovanni (Istituto Nazionale di Fisica Nucleare)

Relatore: DE GREGORIO, Giovanni (Istituto Nazionale di Fisica Nucleare)

Classifica Sessioni: Strongly correlated nuclear systems (II)