

Shell evolution and core excitations in semi-magic nuclei

FRÉDÉRIC NOWACKI

Institut Pluridisciplinaire Hubert Curien
Bât.27/1,
BP 28
F-67037 Strasbourg , France [†]

Recent advances in Large Shell Model calculations allow now to treat extended valence spaces and more complete descriptions of (semi-)magic nuclei can be achieved with inclusion of core excitations. The interplay between shell evolution and core excitations in semi-magic nuclei will be illustrated for Nickel and Tin isotopic chains in the framework of Large Shell Model calculations. pn and nn monopole relative influence will be traced back on electromagnetic observables as $B(E2)$'s and g factors.

[†] frederic.nowacki@ires.in2p3.fr