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## Structure evolution towards 78Ni : challenges in the interpretation of hard-won experimental data solved by simple means

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Considerable efforts have been recently deployed in order to reach experimentally the region in the immediate vicinity of 78Ni to assess the doubly magic character of this very neutron rich nucleus. The PARRNe ISOL device has been operating at IPN Orsay since more than a decade. Originally conceived as a test bench for R&D studies in the framework of the SPIRAL2 project, the performance of the setup has proven suitable to undertake a physics research program on the evolution of N=50 towards 78Ni by beta-decay studies. Though data remain relatively scarce, a global picture of the structure in this very neutron/proton asymmetric region is now emerging and shell model calculations in the natural valence space of 78Ni are being developed. In this talk, I will present how experimental evidence found in beta-decay studies integrates in the more global body of data coming from different experimental approaches. It allows in particular a glimpse to the evolution of the proton and neutron effective energy sequences - as well as to the evolution of the N=50 gap itself and its implication on the observed structures. The microscopic origin of these observed evolutions remains subject to debate.

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