

## Isomer spectroscopy below 100Sn

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Isomers in regions around magic and doubly-magic nuclei allow for testing and tuning shell-model interactions and single particle energies and help for understanding of nuclear structure. Experimental transition strengths allow for determination of effective charges, while core-excited isomers manifest the shell gap and stress the importance of particle-hole excitations of the magic core.

In the region of the nuclear chart below 100Sn there is a multitude of nuclei with one or more isomeric states, both of seniority and spin-gap origin, some of which also core excited [1].

Following the experimental achievements of the last decades, a recent RISING experiment performed at the GSI, Darmstadt, yielded information about known and new isomeric states in the region, some predicted more than 30 years ago[2]. Our results on isomer spectroscopy of  $^{94}\text{Pd}$ [3],  $^{96}\text{Ag}$ [4],  $^{96}\text{Cd}$ [5] and  $^{98}\text{Cd}$ [6] as well as new preliminary results will be presented.

A comparison to shell-model calculations in various model spaces as well as implications for the nuclear structure around 100Sn will be presented and discussed.

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- [6] A. Blazhev et al., J. Phys.: Conf. Ser. 205, 012035 (2010)

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**Classification de Session:** structure of proton rich nuclei around 100sn

**Classification de thématique:** Proton rich nuclei in the vicinity of 100Sn