



Contribution ID: 121

Type: **Invited Oral**

New results from in-beam and decay spectroscopy in the region around doubly-magic ^{132}Sn performed at the Radioactive Isotope Beam Facility

Friday, 21 July 2023 10:45 (25 minutes)

In the last decade, a considerable progress in the understanding of the structure of nuclei in the vicinity of ^{132}Sn , the heaviest doubly-magic nucleus far-off stability accessible for experimental studies, was achieved. The vast amount of results obtained in several experimental campaigns performed at the Radioactive Isotope Beam Facility (RIBF) in Japan, in combination with state-of-the-art theoretical investigations, contributed in a significant way to this progress. In the present contribution, we will discuss unpublished results from several different experiments. We will start with new (and maybe last?) results from an experiment which was dedicated to decay spectroscopy in the ^{132}Sn region and performed during the EURICA campaign in 2014. This experiment already delivered a lot of very valuable information giving rise to the publication of numerous articles over the last years. Some examples are the first observation of the decay of the isomeric $6+$ states in $^{136,138}\text{Sn}$ or the identification of the $p_{3/2}$ proton single-hole state in ^{131}In . Regarding in-beam γ -ray spectroscopy, exciting new results from various experiments performed with the DALI2+ spectrometer consisting of NaI scintillator detectors as well as with the HiCARI array, which is based on both segmented and unsegmented Ge detectors, will be discussed. The talk will close with a glance at the exciting future perspectives in the region around ^{132}Sn .

Primary author: Dr JUNGCLAUS, Andrea**Presenter:** Dr JUNGCLAUS, Andrea**Session Classification:** Session 15**Track Classification:** Experimental Nuclear Structure