



Contribution ID: 45

Type: **Poster presentation**

Energy-resolvable $E1$ - and $M1$ -strength distribution in ^{70}Zn

A series of nuclear resonance fluorescence experiments was conducted with bremsstrahlung at γELBE and a quasi-monoenergetic, polarized photon source at $\text{HI}\gamma\text{S}$.

The acquired experimental data allows for a model-independent determination of the dipole response of the most neutron-rich stable zinc isotope, ^{70}Zn , which will aid in a better understanding of collective nuclear excitations

like the Scissors mode or the Pygmy dipole resonance, but also facilitates conclusions on shape coexistence in the $N = 40$ subshell closure.

The status of the analysis, including the energy-resolvable $E1$ - and $M1$ -strength distributions, will be presented and discussed.

This work is supported by DFG under Project-IDs 499256822–GRK 2891, 279384907–SFB 1245 and by the U.S. Department of Energy, Office of Science, Office of Nuclear Physics, under Grants No. DE-FG02-97ER41041 (UNC), and No. DE-FG02-97ER41033 (Duke, TUNL).

Supported by the ELI-RO program funded by the Institute of Atomic Physics, Măgurele, Romania, contract number ELI-RO/RDI/2024-007 ELITE and the support of the Romanian Ministry of Research and Innovation under research contract PN 23 21 01 06.

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Session Classification: Poster Session