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## The electric dipole response of $^{106}\text{Pd}$ nuclei

*Tuesday, 29 October 2024 13:00 (25 minutes)*

This study aims at understanding the dependence of the E1 strength in the transition region from vibrational to rotational nuclei. The chosen method of study is the Nuclear Resonance Fluorescence method, a two-step photonuclear process which consists of the absorption of a photon and the subsequent resonant re-emission of gamma rays [1].

The experimental data has been acquired using the DHIPS (Darmstadt High-Intensity Photon Source) setup at

This first measurement in  $^{106}\text{Pd}$  uncovered new transitions in the 5–8 MeV energy range. The data will be

### References:

- [1] – A. Zilges, D.L. Balabanski, J. Isaak, and N. Pietralla, *Prog. Part. Nucl. Phys.*, 122 (2022) 103903
- [2] – C. Romig, “Investigation of Nuclear Structure with Relative Self-Absorption Measurements”, PhD thesis, TU Darmstadt, 2014

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