Contribution ID: **71** Type: **Oral**

Recent progress in experimental studies of the Pygmy Dipole Resonance

In the last years it has become obvious that a combination of different experimental approaches is necessary to understand the structure of electric dipole strengths in atomic nuclei (see, e.g., refs. [1-12]) and to be able compare it to theoretical models. Due to the high level density in the energy region of interest, a selective excitation mechanism selective spectroscopy are key requirements of the experiments. In this talk the most recent results of experiments using bremsstrahlung and monoenergetic photon beams, medium-energy and low-energy hadronic probes will be discussed.

Supported by the DFG (ZI 510/7-1).

[1] D. Savran, T. Aumann, and A. Zilges, PPNP **70** (2013) 210.
[2] D. Massarzcyk et al, PRC **93** (2016) 014301
[3] M. Krzysiek et al., PRC **93** (2016) 044330.
[4] D. Negi et al., PRC **94** (2016) 024332.
[5] M. Spieker et al., PLB **752** (2016) 102.
[6] B. Löher et al., PLB **756** (2016) 72.
[7] M. Kimura et al., PRC **95** (2017) 034331.
[8] B.V. Kheswa et al., PRC **95** (2017) 045805.
[9] T. Shizuma et al., PRC **96** (2017) 044316
[10] D. Martin et al., PRL **119** (2017) 182503.
[11] N.S. Martorana et al., PLB **782** (2018) 112.
[12] D. Savran et al., submitted

Primary authors: Prof. ZILGES, Andreas (University of Cologne); Mrs FÄRBER, Michelle (University of Cologne); Mrs MÜSCHER, Miriam (University of Cologne); Mr PICKSTONE, Simon G. (University of Cologne); Dr SAVRAN, Deniz (GSI Darmstadt); Mr WEINERT, Michael (University of Cologne); Mr WILHELMY, Julius (University of Cologne)

Presenter: Prof. ZILGES, Andreas (University of Cologne)

Track Classification: Invited Talk