

GSF Discussion session

Low-energy enhancement

- Can we generalize how the LEE strength/onset behaves.
- Where is it expected to occur?
- LEE systematic from models/experiments?

Low-energy enhancement

- Can we generalize how the LEE strength/onset behaves.
- Where is it expected to occur?
- LEE systematic from models/experiments?

and the scissors mode

- How clear is the connection?

Pygmy Dipole Resonance

- PDR on excited states:
what is the definition
of a PDR?

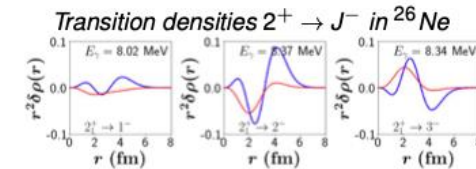
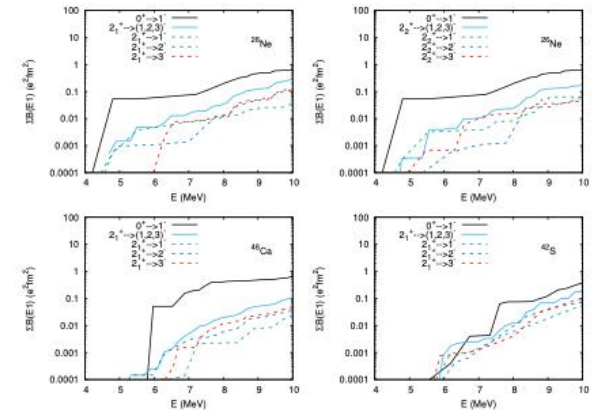
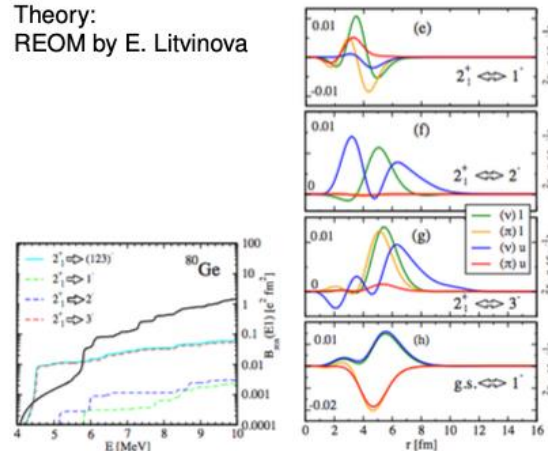
PDR on excited states

First evidence for the $J > 1$ components of the pygmy dipole resonance in neutron-rich nuclei

R. Li^{1,2*}, E. Litvinova^{3,4,5}, M. N. Harakeh⁶, D. Verney¹, I. Matea¹,
L. Al Ayoubi^{1,7}, H. Al Falou⁸, P. Bednarczyk⁹, G. Benzoni¹⁰,
V. Bozkurt¹¹, A. Bracco^{10,12}, M. Ciemala⁹, F. C. L. Crespi^{10,12},
I. Deloncle¹, S. Ebata¹³, A. Gottardo¹⁴, K. Hadyiska-Klep¹⁵,
N. Jovanovic^{1,16}, A. Kankainen⁷, M. Kmieciak⁹, A. Maj⁹,
T. Martínez¹⁷, V. Nanal¹⁸, O. Stezowski¹⁹

Experimental result:
 $J^\pi = (2,3)^- E=5.6\text{MeV} - 8.08\text{MeV} (S_n)$
identified as PDR* (2_1^+)

Theory:
REOM by E. Litvinova



"Comparing PDR and PDR* (2^+)
needs a clearer definition of PDR "

Pygmy Dipole Resonance

- Oslo method across many Sn isotopes shows “constant” strength.
- From models an increase is expected.
- Is the PDR expected to obey the BA hypothesis?

E2 component of the GSF

- Should it be considered
 - Compare to situation of M1 which was “ignored” for a long time

Coordinated experimental efforts to measure same nuclei with different techniques and perform a thorough and “honest” assessment of strengths and weaknesses of experimental techniques

- In reality this does not seem to happen.
- What needs to be done to change that?
- Are there any priority experiments we should focus on?

We have decades worth of data. Much progress in analytical techniques, uncertainty treatment, etc.

- Is it worthwhile for targeted reanalysis of data
 - E.g. Oslo/NRF data
 - With full model and systematic uncertainty budget

Best practices for analyzing and publishing data

- Could we agree on some basics?
 - Provide data tables in supplementary material
 - Uncertainty budget
- How to make our results more “visible” to end users?
 - Are our results used outside of this community?

Any other burning topics?