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A study of the complete electric dipole response in ⁹⁶Mo

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Abstract content
   (Max 300 words)

It was recently illustrated that it is possible to measure the complete electric dipole strength distribution from excitation energies starting below the pygmy dipole resonance (PDR) across the giant dipole resonance (GDR) with high-resolution inelastic proton scattering at angles including 0° for beam energies of a few 100 MeV/nucleon. Such a spectroscopic tool could help resolve the big discrepancies between different datasets for the dipole strength around the neutron threshold region in ⁹⁶Mo. A measurement of the ⁹⁶Mo(p,p') reaction at 200 MeV was performed at iThemba LABS earlier this year. Preliminary experimental results will be presented.

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