

CYCLOTRON COLLOQUIUM

Nuclear Incompressibility, the Asymmetry Term, and Fluffiness of Open-Shell Space

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Thursday, July 21st, 2016 at 3:00 pm,

Cyclotron Institute, Room 228

Refreshments will be served at 2:45 pm

Abstract:

In this talk I will review current status of the research on direct experimental determination of nuclear incompressibility from the isoscalar giant monopole resonances (ISGMR). In particular, recent measurements on a series of Sn and Cd isotopes have provided an "experimental" value for the asymmetry term of nuclear incompressibility. Also, the energy of the ISGMR Cd and Sn isotopes is significantly lower than theoretical predictions using the interactions that correctly predict the ISGMR energies in the closed-shell nuclei, leading to the question: Why are these nuclei so fluffy? Recent measurements on ISGMR with radioactive ion beams will also be discussed.