



Contribution ID: 353

Type: **Oral**

## Searching for the Soft Monopole

*Sunday, 3 December 2023 12:35 (15 minutes)*

The isospin asymmetry of neutron-rich nuclei is expected to impact the excitation energy spectra of such nuclei. The resulting exotic excitation modes which may occur are thus considered to be related to the existence of a neutron excess. The soft monopole resonance, simplistically viewed as the compression of dilute neutron matter in the region of the neutron skin, represents a possible excitation mode occurring due to neutron excess. Theoretical calculations predicted that the mode exists in neutron-rich, however, there has not been a lot of experimental work studying the soft monopole excitation. A possible method for the observation of this excitation mode through inelastic alpha scattering will be explored.

### Attendance Type

**Presenter:** NEVELING, Retief (iThemba LABS)

**Session Classification:** Session 14