Contribution ID: **182** Type: **Poster Presentation**

Analysis of the 150Sm(4He,2n)152Gd data taken with the AFRODITE spectrometer

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The detailed spectroscopy of 152Gd has been studied at iThemba Laboratory for Accelerator Based Sciences using the 150Sm(α,2n)152Gd reaction and the AFRODITE gamma-ray spectrometer. The aim is to investigate the E1 transitions between the octupole and the first excited 02+ bands, and also to build previously known decay scheme of 152Gd and extend it with new transitions that have not been observed within the decay scheme of 152Gd or even new bands. We intend to observe in detail the gamma bands with their odd-even signature splitting and to look for structures (gamma bands and octupole negative parity bands) built on the 02+ configurations.

Summary

Here we are trying to populate the low spins of 152Gd since we were using beam energy of 25mev and to also extend the decay scheme side ways

Apply to be
 considered for a student
   award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
   PhD, N/A)?

Msc

Main supervisor (name and email)
and his / her institution

Name:John Sharpey Schafer
Email:jfss@tlabs.ac.za
Institution:university of the western cape

Would you like to <br> submit a short paper <br> for the Conference
 Proceedings (Yes / No)?

No

Primary author: Mr NETSHIYA, ADIVHAHO (UNIVERSITY OF THE WESTERN CAPE)

Co-authors: Prof. SCHAFER, JOHN (UNIVERSITY OF THE WESTERN CAPE); Dr DINOKO, TSHEPO (ITHEMBA LABS)

Presenter: Mr NETSHIYA, ADIVHAHO (UNIVERSITY OF THE WESTERN CAPE)

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