Contribution ID: **46** Type: **Poster Presentation**

Reaction mechanisms studied using the iThemba LABS recoil detector

Wednesday, 1 July 2015 16:10 (1h 50m)

Abstract content
   (Max 300 words)
Formatting &
Special chars

The iThemba LABS recoil detector has been used to study exotic asymmetric shapes in Po and U isotopes. In these studies other reaction products which were not expected to be observed according to PACE (Projected Angular Momentum Coupled Evaporation) calculation were strongly populated. These products are as a result of other reaction mechanisms other than complete fusion reaction. The presentation will discuss the unexpectedly observed nuclei and the proposed reaction mechanisms leading to their creation.

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

no

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

no

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

n/a

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

yes

Please indicate whether
this abstract may be
published online
(Yes / No)

yes

Primary author: Dr NTSHANGASE, Sifiso Senzo (University of Zululand)

Co-authors: Dr ASCHMAN, David (University of Cape Town); Dr ROUX, David (Rhodes); Dr LAWRIE, Elena (iThemba LABS); Prof. SHARPEY-SCHAFER, John F (UWC); Dr LAWRIE, Kobus (iThemba LABS); Mr STANKIEWICZ, Maciej (University of Cape Town); Dr SHIRINDA, OBED (iThemba LABS); Dr PAPKA, Paul (Stellenbosch University); Dr MASITENG, Paulus (University of Johannesburg); Prof. LIEDER, Rainer (iThemba LABS); Dr BARK, Robert (iThemba LABS); Dr MULLINS, Simon (iThemba LABS (Gauteng)); Mr MAJOLA, Siyabonga (UCT/ iThemba Labs); Dr BVUMBI, Suzan Phumudzo (University of Johannesburg); Mr DINOKO, Tshepo (Student)

Presenter: Dr NTSHANGASE, Sifiso Senzo (University of Zululand)

Session Classification: Poster2

Track Classification: Track B - Nuclear, Particle and Radiation Physics