

Contribution ID: 85

Type: Oral Presentation

Reaction mechanisms studied using the iThemba LABS recoil detector

Wednesday, 11 July 2012 08:00 (20 minutes)

Abstract content
 (Max 300 words)

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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.

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Session Classification: NPRP

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