



国立研究開発法人理化学研究所 仁科加速器研究センター
第270回 RIBF核物理セミナー
RIKEN Nishina Center for Accelerator Based Science
The 270th RIBF Nuclear Physics Seminar

A journey from light neutron rich-nuclei to heavier nuclei
near proton-drip line

Prof. Ushasi Datta
(Saha Institute Of Nuclear Physics, Kolkata, India)

This presentation will discuss how experimental investigations of static ground state nuclear properties and dynamic observables such as excitation spectra have unfolded new understanding of the models, the nuclear forces etc. The shell gaps at magic numbers are the characteristics of a mean nuclear field. Very clear evidences have been observed for melting and merging of magic shell gaps at $N=20, 28$ via Coulomb breakup at GSI, Darmstadt. Some valuable bulk properties of the neutron-rich nuclei play a key role in understanding cosmic phenomena. Shapes and symmetries of the nuclei near proton drip line populated by compound nuclear reaction are being explored using Indian national gamma array. Exploring “Island of cluster emitter” near proton drip line using ISOLDE, CERN facility is another activity. At present, a small high current accelerator has been installed at our institute to explore some key reactions of nucleosynthesis processes.

Mar.29th(Fri.)2019 13:30~
Nishina Hall, Nishina bldg., RIKEN

* The talk will be given in English language.

Contact: Nuclear Physics Seminar Organizing Committee
npsoc@ribf.riken.jp
<http://ribf.riken.jp/~seminar/>