



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248回 RIBF核物理セミナー

RIKEN Nishina Center for Accelerator Based Science
The 249th RIBF Nuclear Physics Seminar



Di-neutron correlation, pairing collectivity and pair transfer in neutron-rich systems

Prof. Masayuki Matsuo

(Department of Physics, Faculty of Science, Niigata University)

The di-neutron correlation has been one of the central subjects in the studies of neutron-rich nuclei since the discovery of two-neutron halo nucleus ${}^6\text{Li}$. Importance of this correlation may be emphasized in connection with the universal many-body phenomenon in pair-correlated Fermion systems, known as the BCS-BEC crossover. In this seminar talk, I intend to clarify richness of the physics of di-neutron correlation by discussing 1) a simple and general rule of emergence of the di-neutron correlation, and 2) possible anomalous features of the low-lying and the giant pair vibration states in Sn isotopes with $A > 132$ and $A < 132$. I shall discuss also 3) our recent study of the collective pairing phenomena in the neutron star inner crust.

* The talk will be given in English language..

Mar.20th(Tue.)2018 13:30~
Nishina Hall, Nishina bldg., RIKEN

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