

独立行政法人理化学研究所 仁科加速器研究センター 第63回RIBF核物理セミナー

RIKEN Nishina Center for Accelerator Based Science The 63rd RIBF Nuclear Physics Seminar

Probing nuclear structure far-off stability with RISING
- Gamma-ray spectroscopy with Radioactive Beams at GSI

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The Rare Isotope Spectroscopic INvestigation at GSI (RISING) project is a major pan-European collaboration. Its physics aims are the studies of exotic nuclear matter with abnormal proton-to-neutron ratios compared with naturally occurring isotopes. RISING combines the FRagment Separator (FRS), which allows relativistic energies and projectile fragmentation reactions, with EUROBALL Ge Cluster detectors for gammaspectroscopic research. The RISING setup can be used in two different configurations. Either the nuclei of interest are investigated after being stopped in delayed gamma-ray spectroscopy or the heavy ions hit a secondary target at relativistic energies and the thereby occurring excitations are studied. For the latter case, MINIBALL Ge detectors and the HECTOR BaF2 array are used in addition. Example achievements of both configurations are presented and their physical impact discussed.

Jun. 24(Tue), 2008 15:00-RIBF Conf. Hall, RIKEN The seminar will be given in English

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