



独立行政法人理化学研究所 仁科加速器研究センター  
第103回RIBF核物理セミナー

RIKEN Nishina Center for Accelerator Based Science  
The 103th RIBF Nuclear Physics Seminar

New ideas and prospects for production of heavy and superheavy neutron rich nuclei

Prof. Valery Zagrebaev ( Flerov Lab. of Nuclear Reaction, JINR )

The experiment on synthesis of element 117 (culminating the  $^{48}\text{Ca}$  epoch) will be briefly reported along with future plans of the Flerov laboratory in this field. Theoretical estimations of the cross sections for production of superheavy elements in fusion reactions of heavier than calcium projectiles (as well as radioactive nuclei) with actinide targets will be discussed. Particular attention will be given to low-energy multi-nucleon transfer reactions which allow one to produce heavy and superheavy neutron rich nuclei located at the “island of stability” and in the region of the “blank spot” of the nuclear map southward of  $^{208}\text{Pb}$ .

June. 4 ( Fri ), 2010 13:30-  
RIBF Conf. Hall, RIKEN

*The seminar will be given in English.*

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