

独立行政法人理化学研究所 仁科加速器研究センター 第50回RIBF核物理セミナー RIKEN Nishina Center for Accelerator Based Science The 50th RIBF Nuclear Physics Seminar

Synthesis of superheavies. State of affair and outlook.

Prof. Valery Zagrebaev

(Flerov Laboratory of Nuclear Reaction, JINR, Dubna, Russia)

Resent experimental results on synthesis of superheavy elements will be reviewed in the talk. Strongly coupled and competitive processes of deep inelastic scattering, fusion, fission and quasi-fission will be analyzed within a realistic dynamical model. Future trends and alternative ways for production of superheavy nuclei in the region of the "island of stability" will be also discussed. In particular, a large mass transfer caused by the shell effects in low-energy damped collisions of transacinides will be considered for the purpose of the formation of the surviving superheavy long-lived neutron-rich nuclei.

Oct. 26 (Fri), 2007 13:30-RIBF Conf. Hall, RIKEN The seminar will be given in English. Contact: RIBF Nuclear Physics Seminar Organizer seminar@ribf.riken.jp http://ribf.riken.jp/~seminar