**Application of multinucleon transfer reactions
to the synthesis of neutron-rich nuclei**

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Multinucleon transfer in low-energy nucleus-nucleus collisions is proposed as a method of production of yet-unknown neutron-rich nuclei hardly reachable by other methods [1,2]. Modeling of dynamics of nuclear reactions induced by heavy ions in its full complexity of competing reaction channels remains to be a challenging task. The work is aimed at development of such a model and its application to the analysis of multinucleon transfer in deep inelastic collisions of heavy ions leading, in particular, to formation of neutron-enriched isotopes of heavy and superheavy nuclei [3].

[1] V. Zagrebaev and W. Greiner, J. Phys. G **34**, 1 (2007).

[2] V. Zagrebaev and W. Greiner, J. Phys. G **35**, 125103 (2008).

[3] A.V. Karpov and V.V. Saiko, Phys. Rev. C **96**, 024618 (2017).