

# Possibilities to describe the production of rare isotopes close to drip-line in the Fermi energy domain \*

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In the Fermi energy domain, the production of rare isotopes with large neutron/proton excess has to be considered as a two step process including the production of excited nucleus in the first stage and its de-excitation in the latter stage. The deep inelastic transfer and the incomplete fusion determined by a geometric overlap of nuclei are assumed as a production mechanisms of excited nuclei. A cooling via emission of fast pre-equilibrium particles is introduced in an approximate way using simple phenomenological assumptions. Various modes of de-excitation ranging from particle evaporation to statistical multifragmentation are examined. A possibility to describe a broad range of data in both symmetric and asymmetric systems and in normal and inverse kinematics will be discussed ( see also [1] ).

[1] M. Veselsky, nucl-th/0010069.

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