Nuclear periphery in mean-field models.

Andrzej Baran, Paweł Mierzyński and Kamila Sieja

Institute of Physics UMCS, Lublin, Poland

Abstract

We use the δ_B function defined by Boethe and Δ_B function which is the integral of the former to describe the nuclear periphery. Two mean-field models are considered: Relativistic Mean Field (RMF) and the Skyrme model. The results of RMF an Skyrme calculations are comparable. Outer neutron excess given by Δ_B function is confronted with the experimentally measured halo factors. Both delta functions are good characteristics of density distributions in the peripheral part of the nucleus.