

PROTON DRIP-LINE NUCLEI IN RELATIVISTIC MEAN-FIELD THEORY¹

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The position of the two-proton drip line has been calculated for even-even nuclei with $10 \leq Z \leq 82$ in the framework of the relativistic mean-field (RMF) theory. The current model uses the NL3 effective interaction in the mean-field Lagrangian and describes pairing correlations in the Bardeen-Cooper-Schrieffer (BCS) formalism. The predictions of the RMF theory are compared with those of the Hartree-Fock+BCS approach (with effective force Skyrme SIII) and the finite-range droplet model (FRDM) and with the available experimental information.

¹Abstract of published paper: Phys. Rev. C **58**, 1467–1472 (1998).

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