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# Calculating fission barrier & paths influenced by proton and neutron magicity

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The macroscopic-microscopic method is used to calculate penetrabilities for different fission channels around proton and neutron magic numbers from uranium and plutonium. The liquid drop part is obtained from the Yukawa-plus-exponential potential, whereas the single-particle energy levels are computed with the deformed two center shell model. The shell correction part is obtained by the Strutinsky method, separately for protons and neutrons. Calculations are applied to the fission of 244Pu among different fission Channels.

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