Abstract Submitted
for the DNP10 Meeting of
The American Physical Society

CASCADE and PACE4 calculations for β decay population of low-lying levels in 186Pt[1] EN EN JIANG, CEN DENG, The University of Richmond, GABRIELA ILIE COLLABORATION, MIRELA S. FETEA COLLABORATION — Accurate information on the low-lying levels in the intermediate Pt nuclei, to serve as a basis for structural interpretation, is needed to study the transition from coexisting structures in the lighter Pt nuclei to γ -soft structure in the heavier Pt nuclei. CASCADE and PACE4 reaction simulation programs were used to find suitable reactions for the production of unstable 186Au in different neutron channels that would allow the measurement of the energies and decay properties of low-lying levels in 186Pt, populated in the β-decay. The results of our calculations as well as a discussion on why we determined 175Lu (16O, 5n) to be the most efficient reaction, will be presented.

[1]Howard Hughes Medical Institute Grant

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Date submitted: 02 Aug 2010 Electronic form version 1.4