

Abstract Submitted
for the DNP06 Meeting of
The American Physical Society

Nuclear Fission for Nuclei in the Region $190 \leq A \leq 330$ ¹ PETER MOLLER, Theoretical Division, Los Alamos National Laboratory, KARL-LUDWIG KRATZ, Institut für Kernchemie, Universität Mainz — At the DNP meeting in Maui one year ago we reported on initial results on fission calculations of nuclei at the end of the r-process. We now have much more complete results for nuclei in this region. Compared to our preliminary results, in which the potential energy was calculated for about 1 000 000 different shapes we now consider more than 5 000 000 different shapes. More elongated and more mass-asymmetric shapes are included in the current more comprehensive results. We compare our calculated barrier heights to available actinide experimental data. We also present calculated barrier heights for all nuclei in this region of the nuclear chart, more than 3000. We furthermore calculate beta-decay strength functions which allows us to study beta-delayed fission at the end of the r-process. First results on the termination of the r-process by fission, which is to a large extent determined by the relations between barrier heights and neutron-separation energies will also be presented.

¹This work was carried out under the auspices of the National Nuclear Security Administration of the U.S. Department of Energy at Los Alamos National Laboratory under Contract No. DE-AC52-06NA25396.

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Date submitted: 30 Jun 2006

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