

Abstract Submitted
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Statistical model of heavy-ion fusion-fission reactions JOHN LESTONE, Los Alamos National Laboratory, SCOTT MCCALLA, Brown University — Methods commonly used to estimate the Bohr-Wheeler fission decay width are incorrect for several reasons. After making corrections to standard computational techniques, we find the cross-section and neutron-emission data from heavy-ion fusion-fission reactions are consistent with the fission of fully equilibrated systems with fission lifetime estimates obtained via a Kramers-modified statistical model. The strong increase in the nuclear viscosity above a temperature of ~ 1.3 MeV deduced by others is an artifact generated by an inadequate model.

John Lestone
Los Alamos National Laboratory

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