

Abstract Submitted  
for the DNP08 Meeting of  
The American Physical Society

**Fission-fragment properties in a microscopic approach**<sup>1</sup> WALID YOUNES, Lawrence Livermore Natl Lab — The microscopic description of fission remains one the greatest challenges in nuclear physics. In particular, observed properties of the fission fragments (e.g., kinetic energies, emitted neutron multiplicities, etc.) are notoriously difficult to reproduce and provide a stringent test of the microscopic approach. In this talk, I will present fission-fragment properties extracted from Hartree-Fock-Bogoliubov calculations using the Gogny effective interaction for low-energy induced fission of  $^{240}\text{Pu}$ . This approach to fission provides a fully microscopic, self-consistent, quantum-mechanical framework where the only phenomenological input is the effective interaction between nucleons. I will discuss the formal identification of scission configurations and compare deduced fragment properties, such as excitation and kinetic energies, to experimental data.

<sup>1</sup>This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

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Date submitted: 30 Jun 2008

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