Abstract Submitted for the OSF05 Meeting of The American Physical Society

Simple Model for the Critical Mass of a Fissile Nuclide CAMERON

REED, Alma College — A straightforward time-independent model for determining the critical mass of a spherical sample of a fissile nuclide is developed. Only elementary scattering theory and probability concepts are used. This model is suitable for presentation to students at a sophomore level and gives results in excellent accord with published values.

> Cameron Reed Alma College

Date submitted: 22 Jun 2005

Electronic form version 1.4