Abstract Submitted for the APR12 Meeting of The American Physical Society

Isotopic Trends in Dynamical Breakup¹ SYLVIE HUDAN, RO-MUALDO DE SOUZA, Indiana University — The simultaneous measurement of neutrons and charged particles produced in peripheral and mid-peripheral collisions in a heavy-ion cross-bombardment reaction 124,136 Xe + 112,124 Sn at E/A = 50 MeV is described. Dynamical decay in which the excited projectile-like fragment (PLF) decays on the timescale of its rotation is observed. The correlation between the composition of the lighter fragment, the size of the lighter fragment, the velocity damping and the decay orientation is examined. The influence of the target N/Z on the fragment composition is also studied.

 $^1\mathrm{Work}$ supported by the U.S. Dept. of Energy, Office of Science under Grant No DE-FG02-88ER40404

Sylvie Hudan Indiana University

Date submitted: 21 Dec 2011

Electronic form version 1.4