Abstract Submitted
for the APR18 Meeting of
The American Physical Society

Critical Collapse in the Absence of Spherical Symmetry[1]
THOMAS BAUMGARTE, Bowdoin College — Critical phenomena in gravitational collapse refer to the appearance of universal scaling laws and a critical self-similar solution close to the threshold of black-hole formation. The seminal discovery of these phenomena by Matt Choptuik about 25 years ago triggered a large body of literature on the subject. Most of these studies, however, have assumed spherical symmetry. In this talk I will review some recent results on critical phenomena in the absence of spherical symmetry, focussing on the stability of the critical self-similar solution to aspherical modes.

[1]Supported in part by the National Science Foundation

Thomas Baumgarte
Bowdoin College

Date submitted: 11 Jan 2018 Electronic form version 1.4