Jordan Keller* (jordan_keller@fas.harvard.edu), Mu-Tao Wang and Pei-Ken Hung.

Linear Stability of Higher Dimensional Schwarzschild Black Holes.

The Schwarzschild-Tangherlini black holes are higher-dimensional generalizations of the Schwarzschild spacetimes, comprising a static, spherically symmetric family of black hole solutions to higher-dimensional vacuum gravity. The physical relevance of such solutions is intimately related to their stability under gravitational perturbations. We present results on the linear stability of the Schwarzschild-Tangherlini black holes in dimensions four, five, and six, joint work with Pei-Ken Hung and Mu-Tao Wang. (Received February 07, 2018)