The mass of the static extensions of small spheres

Ye-Kai Wang
Department of Applied Mathematics
National Yang Ming Chiao Tung University

Abstract

Bartnik proposed a definition of quasilocal mass in general relativity in 1989. The definition leads to several outstanding problems in geometric analysis, most notably the Static Extension Conjecture. We discuss some recent result in this direction and the question of small sphere limits of Bartnik mass. This talk is based on joint work with Brian Harvie.