APR14-2014-000193

Abstract for an Invited Paper for the APR14 Meeting of the American Physical Society

Numerical Investigations of Singularities in General Relativity DAVID GARFINKLE, Oakland University

The singularity theorems of general relativity tell us that spacetime singularities form in gravitational collapse, but tell us very little about the precise nature of these singularities. More information can be found using analytic approximations and numerical simulations. It is conjectured that inside black holes are two types of singularities: one that is spacelike, local, and oscillatory, and the other that is null and weak. This talk will review what numerical simulations of singularities have been done and the extent to which the above conjecture has been verified by the simulations.