The Mathematical Analysis of the Interior of Black Holes in General Relativity

Jonathan Luk, Cambridge

Abstract

An important open problem in mathematical general relativity is to understand the singularity structure in the interior of generic black holes. The problem is closely related to the celebrated strong cosmic censorship conjecture of Penrose. I will describe in this talk some recent progress on the above problem based on joint works with S.-J. Oh and M. Dafermos.