

1060-53-102

Jeffrey L. Jauregui* (jeff@math.duke.edu), Mathematics Department, Duke University, Box 90320, Durham, NC 27708. *The harmonic conformal class and the Penrose inequality.*

I will introduce some invariants of the harmonic conformal class of an asymptotically flat manifold and their relationship with the Penrose inequality in general relativity. The invariants are not numbers, but real-valued functions. (Received March 24, 2010)