

1165-35-256

Dejan Gajic*, dg405@cam.ac.uk. *Mode coupling and late-time asymptotics of linear waves on rotating black holes.*

I will discuss a recently discovered connection between the presence of late-time tails in the dynamical behavior of black hole solutions to Einstein's equations of general relativity and the existence of conservation laws "at infinity". Understanding late-time tails is important for determining the nature of singularities inside dynamical black holes. I will focus in particular on new work, obtained in collaboration with Y. Angelopoulos and S. Aretakis, that addresses the effect of the rotation of black holes on late-time tails. (Received January 19, 2021)