

Contributed Talk

Name: João Rodrigues

Position: PhD Student

Affiliation: Universidade de Coimbra

Title: Asymptotic quasinormal modes of string-theoretical d-dimensional black holes

Abstract: We compute the quasinormal frequencies of d-dimensional spherically symmetric black holes with leading string α' corrections for tensorial gravitational perturbations in the highly damped regime. We solve perturbatively the master differential equation and we compute the monodromies of the master perturbation variable (analytically continued to the complex plane) in different contours, in order to obtain the quasinormal mode spectra. We proceed analogously for the quasinormal modes of test scalar fields. Differently than in Einstein gravity, we obtain distinct results for the two cases.