

Kodama-like Vector Fields in Axisymmetric Spacetimes

Tuesday 26 March 2024 16:00 (35 minutes)

We present a Kodama-like time translation symmetry in a non-stationary axisymmetric spacetime, characterized by a timelike vector field with an associated conserved current. In the asymptotically flat region, the charge of this current coincides with the ADM mass. These findings are significant for advancing the study of quantum field theory in dynamical backgrounds and, in particular, the evaporation of rotating black holes.

Presenter: DORAU, Philipp