10th International Conference on Gravitation and Cosmology: New Horizons and Singularities in Gravity (ICGC 2023)



Contribution ID: 322 Type: Poster

Shadow of Rotating Bardeen Blackhole in Asymptotically Safe Gravity

In this paper, We have studied the Shadow cast by a rotating Bardeen black hole in the background of asymptotically safe gravity. Using Hamilton-Jacobi variable separation method we have derived the null geodesics and the shadow observables. We have found that the size of the shadow decreases with an increase in ASG parameter (ω) and gets more distorted with an increase in spin parameter (a). The shadow characteristics depend on the blackhole's monopole charge (g). We have used the shadow observables to calculate the Energy emission rate of the blackhole for changing ASG parameters.

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Session Classification: Classical & Quantum Gravity

Track Classification: Classical & Quantum Gravity