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



Contribution ID: 294

Type: Poster

## Numerical simulations of relativistic radiatively driven jets

We present the axisymmetric numerical simulations of the relativistic transonic jets around black holes driven by the radiation field of the accretion disk. We show that starting from a very low velocity at the base, jets can be accelerated to relativistic terminal speeds. Our results show the morphology of the jets during their different evolutionary stages. In addition to acceleration, the radiation also acts as a collimating agent. The radiation pressure acts as the primary collimating agent, which suppresses the lateral expansion of the. The radiation field can also remove angular momentum from the jet and make the jet stable against the centrifugal force.

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Track Classification: Astrophysical Relativity