

Relativistic low angular momentum accretion.

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ABSTRACT

I will report on the results of the joint numerical project with J.A. Font and P. Mach. We investigated low angular momentum accretion of inviscid fluids on black holes. The Newtonian calculation in this topic have been already done by D. Proga and M. Begelman [1]. Our work promotes their models to fully relativistic setting. The starting point of those simulations is the Bondi-type accretion solution, perturbed by adding a small amount of angular momentum. The results of simulations will be discussed, emphasizing the similarities and differences with Newtonian models.

References

- [1] D. Proga, M. Begelman, Accretion of Low Angular Momentum Material onto Black Holes: Two-dimensional Hydrodynamical Inviscid Case, *Astrophys. J.* **582**, 69 (2003).