

# Relativistic Disk-Jet Equilibrium Structure Formation

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We developed a theoretical model to describe a system consisting of a powerful jet and a relativistic accretion disk in which the Beltrami-Bernoulli equilibrium approach was adopted. Charged electron-ion gas is considered in photon gas. To obtain the analytical (self-similar) solution, we derived the equations in corresponding orthogonal variables. Our equilibrium solution describes the formation of the relativistic disk-jet system in which the jet characteristic parameters are determined by the characteristic parameters of the accretion disk, among which the turbulent viscosity becomes crucial. For magnetic field of disk-jet structure a single Beltrami (force-free) approach is used. Derived results can be used to analyze the astrophysical jet outflow from the relativistic accretion disk.

## References

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