Title: Electrogeodesics and extremal horizons in Kerr-Newman-(anti-)de Sitter

Abstract:

Charged rotating black holes with (anti-)de Sitter asymptotics due to a non-zero cosmological constant can be modeled by the most general stationary black-hole solution within the framework of classical 4D general relativity---the Kerr-Newman-(anti-)de Sitter space-time. First, we briefly review some of the space-time's general properties and then we talk about the possible extremal configurations. Finally, using Lagrangian formalism we discuss selected trajectories of charged test particles in the space-time, focusing on the equatorial plane and the axis.

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