

High Energy Physics - Theory

Chiral Phase Transitions around Black Holes

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In this paper we discuss the possibility that chiral phase transitions, analogous to those of QCD, occur in the vicinity of a black hole. If the black hole is surrounded by a gas of strongly interacting particles, an inhomogeneous condensate will form. We demonstrate this by explicitly constructing self-consistent solutions.

Comments: 4 pages; 3 figures

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