

GRAVITATIONAL COLLAPSE OF MONOPOLE-HUSAIN SPACETIME

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Abstract

We study the influence of the monopole field on the occurrence of the naked singularities arising in Husain spacetime. Both naked singularities and black holes are shown to be developing as the final outcome of the collapse. For an appropriate choice of the arbitrary functions, the outgoing radial null geodesics emanating from the central singularity admit one or more positive roots. The naked singularities are found to be strong in the Tipler sense, violating cosmic censorship hypothesis.

Keywords: Cosmic censorship hypothesis, Naked singularity, Gravitational collapse, Black hole

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