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STABILITY OF NAKED SINGULARITIES IN FIVE-DIMENSIONAL SPACE-TIMES

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Abstract

In this paper, we discuss the stability of naked singularities in higher-dimensional space-times. It is known that the validity of cosmic censorship hypothesis could depend on the dimensions of the space-time. Hence it becomes essential to study stability of singularities in higher-dimensional space-times as well. In the present paper it has been shown that the naked singularities arising in five-dimensional T-B-L space-times are stable with respect to perturbation of initial data.

Key Words : *Cosmic censorship hypothesis, Naked singularity, Gravitational collapse, Black hole.*

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