

General Relativity and Quantum Cosmology

Fuzziness at the horizon

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We study the stability of the noncommutative Schwarzschild black hole interior by analysing the propagation of a massless scalar field between the two horizons. We show that the spacetime fuzziness triggered by the field higher momenta can cure the classical exponential blue shift divergence, suppressing the emergence of infinite energy density in a region nearby the Cauchy horizon.

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