

# Quantum Inequalities and Cosmic Censorship

*Wednesday, January 22, 2025 3:35 PM (40 minutes)*

In this talk, I will explore the impact of quantum corrections on black holes regarding spacetime inequalities and the weak cosmic censorship conjecture. I will present refined versions of the quantum Penrose and reverse isoperimetric inequalities, valid in three-dimensional asymptotically anti-de Sitter spacetimes, and discuss their implications for cosmic censorship and black hole entropy. Additionally, I will analyze test particle dynamics in quantum rotating BTZ black holes, showing that quantum effects strengthen cosmic censorship.

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