

(Anti-)de Sitter Black Hole Entropy and Generalized Uncertainty Principle

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Abstract: We generalize the method that is used to study corrections to Cardy-Verlinde formula due to generalized uncertainty principle and discuss corrections to Cardy-Verlinde formula due to generalized uncertainty principle in (anti)-de Sitter space. Because in de Sitter black hole spacetime the radiation temperature of the black hole horizon is different from the one of the cosmological horizon, this spacetime is a thermodynamical non-equilibrium spacetime.

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Key words: entropy correction, generalized uncertainty principle, non-equilibrium spacetime

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