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Black Hole Chemistry in de Sitter: A New Approach

Monday 11 June 2018 17:45 (15 minutes)

In the context of black hole chemistry, we study the thermodynamics of asymptotically de Sitter black holes with conformal scalar hair in Einstein gravity. The hair parameter allows us to reach thermodynamic equilibrium between the event horizon and the cosmological horizon. We find that the system of the black hole and the de Sitter space surrounding it undergo a phase transition that resembles the Hawking-Page phase transition provided we consider the micro-canonical ensemble.

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