



Schwarzschild-de Sitter black hole from entropic viewpoint

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In a Schwarzschild-de Sitter space, we consider an equipotential surface which consists of two holographic screens. Adapting the Bousso-Hawking's reference point of vanishing force, we divide the space into two regions, which are from the reference point to each holographic screen. These two regions can be treated as independent thermodynamical systems, because the Bousso-Hawking reference point with zero temperature behaves like a thermally insulating wall. The entropy obtained in this way agrees with the conventional results; i) when the holographic screens lie at the black hole and cosmological horizons, ii) in the Nariai limit.

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