

"Holography of hyperscaling violating theories"

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Abstract

I will present some recent construction of hyperscaling violating geometries, where such a geometry occurs in an intermediate region of AdS₄ space. I shall demonstrate that in these constructions, the IR completion of the hyperscaling violating geometries is accomplished through an AdS₂ \times R² region and study the conditions for emergence of this AdS₂ \times R² region, under certain assumptions. I will focus on the mechanism in which such intermediate geometries can exhibit hyperscaling violation, even though they may not be an exact solution to the system of equations under consideration. Finally, I will use this mechanism to embed these solutions in supergravity.