

Emergent Schwarzschild and Reissner-Nordstrom black holes in four dimensions: An effective curvature sourced by a B_2 -field on a D_4 -brane

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References

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ABSTRACT

We obtain a Schwarzschild and Reissner-Nordstrom emergent black holes by exploring the torsion dynamics in a generalized curvature formulation, underlying an effective D_4 -brane on S^1 . It is shown that a constant effective metric, sourced by a background fluctuation in B_2 potential, on a D_3 -brane receives a dynamical quantum correction in the presence of an electric charge.

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