

Low d singularities

Friday 19 January 2024 12:30 (30 minutes)

We study black holes in two and three dimensions that have spacelike curvature singularities behind horizons. The 2D solutions are obtained by dimensionally reducing certain 3D black holes, known as quantum BTZ solutions. Furthermore, we identify the corresponding dilaton potential and show how it can arise from a higher-dimensional theory. Finally, we show that the rotating BTZ black hole develops a singular inner horizon once quantum effects are properly accounted for, thereby solidifying strong cosmic censorship for all known cases.

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