

A ghost and a naked singularity: facing our demons

Tuesday, January 29, 2019 2:10 PM (40 minutes)

We encounter these demons on the path towards a UV complete QFT of gravity and a horizonless replacement for black holes. The fate of the ghost and related issues are discussed in the strong coupling version of classically scale invariant quadratic gravity. We compare this story to QCD. The 2-2-hole solutions appearing in a classical approximation of the gravity theory are then discussed, along with some new results. The timelike singularity is shrouded by a fireball and thorny issues of black hole horizons are avoided. Observable consequences might even lurk in present LIGO data.

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