

# What happens at the end of Hawking's evaporation?

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There are three distinct regions where quantum gravity becomes non-negligible in a black hole spacetime. I illustrate a number of indications we have about what happens in each of them, coming both from the classical Einstein equations and from loop quantum gravity. These point all to an interesting scenario: long living remnants stabilized by quantum gravity, formed by a large and slowly decreasing interior enclosed into a small anti-trapping horizon. Contrary to what too often stated, the scenario offers also a proof of principle that there is no tension between unitarity and the equivalence principle: the tension comes from postulating a version of holography which is too strong: a fad, for which there is no solid physical evidence.

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