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Diffue emission from black hole remnants

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At the end of its evaporation, a black hole may leave a remnant where a large amount of information is stored. We argue that the existence of an area gap as predicted by Loop Quantum Gravity removes a main objection to this scenario. Remnants should radiate in the low-frequency spectrum. We model this emission and derive properties of the diffuse radiation emitted by a population of such objects. We show that the frequency and energy density of this radiation, which are measurable in principle, suffice to estimate the mass of the parent holes and the remnant density, if the age of the population is known.

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