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WITHDRAWN Strong transient modulation of horizon radiation

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As a black hole grows, its Hawking radiation is not thermal and, depending on the extent to which the Hawking spectrum is modulated, it can carry information about the infalling matter. Analogously, via the equivalence principle, the Unruh spectrum of non-uniformly accelerated trajectories is not thermal and, depending on the extent to which the Unruh radiation is modulated, it can carry information about the trajectory. Here, we calculate the exact extent to which Unruh spectra can be modulated through non-uniform acceleration. We find evidence that the conditions for a strong modulation, and therefore for a strong information-carrying capacity of the spectrum, can realistically be met in the cases of both the Unruh and Hawking effects.

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