

Abstract Submitted
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Quasi-normal modes of a black hole localized on a brane¹ USAMA AL-BINNI, GEORGE SIOPSIS, University of Tennessee — Black holes residing on a brane are expected to be observed at the LHC pointing to the existence of large extra dimensions. Signatures include the spectrum of Hawking radiation and quasi-normal modes through the detection of decay products. We calculate analytically the quasi-normal modes of black holes at the LHC using the WKB approximation. Unlike previous calculations, where the tension of the brane was assumed to be negligible, we obtain analytic expressions which are valid for any value of the tension of the brane (low as well as high).

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