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Black Hole Radiation by Tunnelling Formulation

M. PATHAK

Department of Physics and Astronomical Science. Central University of Himachal Pradesh Dharmashala-176215, India Email: manupathak902@gmail.com

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Abstract. In this paper, we illustrate the Hawking radiation as a tunneling phenomenon in the Hamilton-Jacobi, using WKB approximation and other methods radiation from non-singular. Space –time diagram of the Krushkal and Painleve Gullstrand coordinates are being sown to acknowledge their regular behaviour at the horizon.

Keywords: Principal value, Killing vector, Halmilton-Jacobin equation, Regular coordinates.PACS numbers: 03.65 Sq. 04.62.v.04.70. Bw