

## Quantum Tunneling Radiation of Kerr-NUT Black Hole

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**Abstract:** Based on particles in a dynamical geometry, extending the Parikh's method of quantum tunneling radiation, we deeply investigate the quantum tunneling radiation of Kerr-NUT black hole. When self-gravitating action, energy conservation, and angular momentum conservation are taken into account, the emission rate of the particle on the event horizon is related to the change of Bekenstein-Hawking entropy and the emission spectrum is not precisely thermal, but is consistent with an underlying unitary theory.

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**Key words:** Kerr-NUT black hole, energy conservation, angular momentum conservation, tunneling rate

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