

Disentanglement as a remedy for information paradox

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ABSTRACT

Production of a pair of (entangled) particles inside/outside horizon is an essence of a Hawking radiation. One member of a pair carrying positive/negative energy tunnels through the horizon contributing to the “blackbody radiation”/evaporation of the black hole eventually resulting in an information paradox. Few disentanglement scenarios [1,2] as a cure for an information problem have been recently formulated. We propose here yet another model of disentanglement via interaction outside and/or inside horizon.

References

- [1] E. Verlinde and H. Verlinde, “*Passing through the Firewall*,” arXiv:1306.0515 [hep-th].
- [2] S. Hossenfelder, “*Disentangling the Black Hole Vacuum*,” arXiv:1401.0288v1 [hep-th]