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Black holes, wormholes and entangled states

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We think that black holes are ordinary quantum systems with a finite number of microstates, when we view them from the outside.

A pair of black holes can then be entangled with each other. A special entangled state of this kind can be described by a geometry similar to the maximally extended Schwarzschild black hole. This geometry is a non-traversable wormhole.

We will discuss how to make the wormhole traversable, viewing the process as an example of quantum teleportation.

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