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## Distinguishing the Schwarzschild black hole from the RP3 geon using local measurements

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Recent results have highlighted that local measurement of a quantum field can reveal information about the global structure of spacetime. We therefore investigate the RP3 geon, which is identical to the Schwarzschild black hole except for a topological identification behind the event horizon. In order to model local measurements, we use the Unruh-DeWitt particle detector model. We find that a suitable detector can detect differences in the Hawking radiation that the detector measures in the two different spacetimes. We will analyze and discuss the implications of this result.

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