

Peer Review

Review of: "A Hollow Black Hole"

Matheus Lobo¹

1. Independent researcher

Since general relativity fails to describe what fundamentally happens inside a black hole (including its “singularity”), the paper provides a very nice and novel approach. The main argument I see for the mass being in the shell is that the entropy (which measures the number of states) depends solely on its surface; therefore, the mass should lie on the surface, as established in this paper. For instance, you can only measure quantum states where the objects actually are.

In the conclusion, the author states that “the radius of the event horizon of the MBH may be used to estimate the size of the void.” I would add that the void is a topological defect and, therefore, the “force” from the inside out is a topological force.

The following reference (originally published on 7 Feb 2020) supports the idea that entropy explains why mass lies on the surface:

Lobo, M. P. (2019, April 18). A Hole in the Black Hole. <https://doi.org/10.31219/osf.io/js7rf>

Declarations

Potential competing interests: No potential competing interests to declare.