

General Relativity and Quantum Cosmology

Thin-shell wormholes from charged black holes in generalized dilaton-axion gravity

A. A. Usmani, F. Rahaman, Saibal Ray, Sk. A. Rakib, Z. Hasan, Peter K. F. Kuhfittig

(Submitted on 9 Jan 2010)

This paper discusses a new type of thin-shell wormhole constructed by applying the cut-and-paste technique to two copies of a charged black hole in generalized dilaton-axion gravity, which was inspired by low-energy string theory. After analyzing various aspects of this thin-shell wormhole, we discuss its stability to linearized spherically symmetric perturbations.

Comments: 6 pages, 5 figures

Subjects: **General Relativity and Quantum Cosmology (gr-qc)**

Cite as: [arXiv:1001.1415v1](https://arxiv.org/abs/1001.1415v1) [gr-qc]

Submission history

From: Farook Rahaman [[view email](#)]

[v1] Sat, 9 Jan 2010 10:20:57 GMT (117kb)

[Which authors of this paper are endorsers?](#)

Download:

- [PostScript](#)
- [PDF](#)
- [Other formats](#)

Current browse context:

gr-qc

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1001](#)

References & Citations

- [SLAC-SPIRES HEP](#)
([refers to](#) | [cited by](#))
- [CiteBase](#)

Bookmark([what is this?](#))

[CiteULike logo](#)

[Connotea logo](#)

[BibSonomy logo](#)

[Mendeley logo](#)

[Facebook logo](#)

[del.icio.us logo](#)

[Digg logo](#)

[Reddit logo](#)