

## General Relativity and Quantum Cosmology

# On Classical Analogs of Quantum Schwarzschild and Reissner-Nordstrom Black Holes. Solving the "Mystery of log(3)"

Victor Berezin

(Submitted on 22 Jan 2010)

The model is built in which the main global properties of classical and quasi-classical black holes become local. These are the event horizon, "no-hair", temperature and entropy. Our construction is based on the features of a quantum collapse, discovered while studying some quantum black hole models. But it is purely classical, and this allows to use the Einstein equations and classical (local) thermodynamics and explain in this way the "log(3)" - puzzle.

Comments: Combined and extended version of talks given at the "\$th International Sakharov Conference on Physics", Lebedev Institute, Moscow, Russia, May 18-23, 2009, Joint workshop "Frontiers in Black Hole Physics in Dubna", Dubna, Russia, May 25-30, 2009 and "Twelfth Marcel Grossmann Meeting MG12", Palais d'UNESCO, Paris, France, July 12-18, 2009

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

Cite as: [arXiv:1001.3996v1](https://arxiv.org/abs/1001.3996v1) [gr-qc]

## Submission history

From: Victor Berezin [[view email](#)]

[v1] Fri, 22 Jan 2010 14:00:48 GMT (14kb)

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

Link back to: [arXiv](#), [form interface](#), [contact](#).

## 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](#)