Cornell University Library

We gratefully acknowledge support from the Simons Foundation and member institutions

arXiv.org > gr-qc > arXiv:1107.2910

Search or Article-id

(Help | Advanced search)

All papers ▾ | Go!

General Relativity and Quantum Cosmology

The Poincare Conjecture and the Cosmological Constant

M. D. Maia

(Submitted on 14 Jul 2011)

The concept of deformation of Riemannian geometry is reviewed, with applications to gravitation and cosmology. Starting with an analysis of the cosmological constant problem, it is shown that space-times are deformable in the sense of local change of shape. These deformations leave an observable signature in the space-time, characterized by a conserved tensor, associated with a tangent acceleration, defined by the extrinsic curvature of the space-time. In the applications to cosmology, we find that the accelerated expansion of the universe is the observable effect of the deformation, dispensing with the cosmological constant and its problems.

Submission history

From: M. D. Maia [view email]

[v1] Thu, 14 Jul 2011 19:49:52 GMT (9kb)

Which authors of this paper are endorsers?

References & Citations

- INSPIRE HEP
  (refers to | cited by)
- NASA ADS

Bookmark (what is this?)