## **General Relativity and Quantum Cosmology**

# Features of gravitational waves in higher dimensions

### **Otakar Svitek**

(Submitted on 1 Jan 2010 (v1), last revised 13 Jan 2010 (this version, v2))

There are several fundamental differences between four-dimensional and higher-dimensional gravitational waves, namely in the so called braneworld set-up. One of them is their asymptotic behavior within the Cauchy problem. This study is connected with the so called Hadamard problem, which aims at the question of Huygens principle validity. We investigate the effect of braneworld scenarios on the character of propagation of gravitational waves on FRW background.

Comments:to appear in ERE09 proceedingsSubjects:General Relativity and Quantum Cosmology (gr-qc)Cite as:arXiv:1001.0198v2 [gr-qc]

#### **Submission history**

From: Otakar Svitek [view email] [v1] Fri, 1 Jan 2010 00:37:10 GMT (15kb) [v2] Wed, 13 Jan 2010 17:20:08 GMT (15kb)

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

