

Damour Thibault

Position: Professeur Permanent
Institut des Hautes Etudes Scientifiques.

Period covered: 1989-present



Conferences and educational activities

Mai 2009: Cosmological Frontiers in Fundamental Physics, Workshop of the International Solvay Institutes, Bruxelles (Belgique).

Juillet 2009: 12 th Marcel Grossmann Meeting, Paris (France).

Septembre 2009: Challenges in Theoretical Cosmology, Conference of the Tufts Institute of Cosmology, Talloires (France).

ICRANET-related Collaborations with

Alessandro NAGAR
Orchidea LECIAN

2009 List of publications (T. Damour, A. Nagar and O.M. Lecian)

1. On the gravitational polarizability of black holes.
Thibault Damour, (IHES, Bures-sur-Yvette) , Orchidea Maria Lecian, (IHES, Bures-sur-Yvette & APC, Paris & Rome U. & ICRA, Rome) . IHES-P-09-28, Jun 2009. (Received Jun 2009). 17pp.
Published in Phys.Rev.D80:044017,2009
e-Print: arXiv:0906.3003 [gr-qc]
2. The Equivalence Principle and the Constants of Nature.
Thibault Damour, (IHES, Bures-sur-Yvette) . Jun 2009. 12pp.
Invited talk at ISSI Workshop on The Nature of Gravity: Confronting Theory and Experiment in Space, Bern, Switzerland, 6-10 Oct 2008.
Submitted to Space Sci.Rev.
e-Print: arXiv:0906.3174 [gr-qc]
3. Fermionic Kac-Moody Billiards and Supergravity.
Thibault Damour, Christian Hillmann, (IHES, Bures-sur-Yvette) . IHES-P-09-31, Jun 2009. 55pp.
Published in JHEP 0908:100,2009.
e-Print: arXiv:0906.3116 [hep-th]

4. The Effective One Body description of the Two-Body problem.
 Thibault Damour, (IHES, Bures-sur-Yvette) , Alessandro Nagar, (IHES, Bures-sur-Yvette & INFN, Turin) . Jun 2009. 45pp.
 Lectures given at Orleans School on the Sciences of the Universe: Mass Motion, Orleans, France, 23-25 Jun 2008.
 e-Print: arXiv:0906.1769 [gr-qc]

5. Relativistic tidal properties of neutron stars.
 Thibault Damour, Alessandro Nagar, (IHES, Bures-sur-Yvette & ICRA, Pescara) . Jun 2009. 21pp.
 Submitted to Phys.Rev.D
 e-Print: arXiv:0906.0096 [gr-qc]

6. Gravitational-wave extraction from neutron-star oscillations.
 Sebastiano Bernuzzi, (Parma U. & INFN, Parma & Jena U., TPI) , Luca Baiotti, (Kyoto U., Yukawa Inst., Kyoto) , Giovanni Corvino, (Parma U. & INFN, Parma & Potsdam, Max Planck Inst.) , Roberto De Pietri, (Parma U. & INFN, Parma) , Alessandro Nagar, (IHES, Bures-sur-Yvette & INFN, Turin & ICRA, Pescara) . Feb 2009. 7pp.
 Contributed to 3rd Stueckelberg Workshop on Relativistic Field Theories, Pescara, Italy, 8-18 Jul 2008.
 e-Print: arXiv:0902.2720 [gr-qc]

7. An Improved analytical description of inspiralling and coalescing black-hole binaries.
 Thibault Damour, (IHES, Bures-sur-Yvette & ICRA, Pescara) , Alessandro Nagar, (IHES, Bures-sur-Yvette & ICRA, Pescara & INFN, Turin) . Feb 2009. (Received Apr 15, 2009). 5pp.
 Published in Phys.Rev.D79:081503,2009.
 e-Print: arXiv:0902.0136 [gr-qc]

8. Improved resummation of post-Newtonian multipolar waveforms from circularized compact binaries.
 Thibault Damour, (IHES, Bures-sur-Yvette & ICRA, Pescara) , Bala R. Iyer, (IHES, Bures-sur-Yvette & Raman Research Inst., Bangalore) , Alessandro Nagar, (IHES, Bures-sur-Yvette & ICRA, Pescara & INFN, Turin) . Nov 2008. (Received Mar 15, 2009). 31pp.
 Published in Phys.Rev.D79:064004,2009.
 e-Print: arXiv:0811.2069 [gr-qc]

9. Gravitational-Wave Extraction from Neutron Stars Oscillations: Comparing linear and nonlinear techniques.
 Luca Baiotti, (Tokyo U., Komaba & Potsdam, Max Planck Inst.) , Sebastiano Bernuzzi, (Parma U. & INFN, Parma) , Giovanni Corvino, (Potsdam, Max Planck Inst. & Parma U. & INFN, Parma) , Roberto De Pietri, (Potsdam, Max Planck Inst.) , Alessandro Nagar, (IHES, Bures-sur-Yvette & INFN, Turin & ICRA, Pescara) . Aug 2008. (Received Aug 2008). 27pp.
 Published in Phys.Rev.D79:024002,2009.
 e-Print: arXiv:0808.4002 [gr-qc]