Matthew M. Roberts - Curriculum Vitae

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Born: May 6, 1983–Boston, Massachusetts

Current position

2005-present Graduate Student, University of California, Santa Barbara

Areas of specialization

Physics, string theory, general relativity. AdS/CMT, black hole statistical mechanics.

Education

2010 PH.D. in Physics expected Summer 2010, University of California, Santa Barbara.
2007 M.A. in Physics, October 2007, University of California, Santa Barbara.
2005 B.S. in Physics & Mathematics, May 2005, Brandeis University.

Honors & awards

2005 Physics Faculty Award, Brandeis University
Major in Physics with Highest Honors, Brandeis University
Major in Mathematics with Honors, Brandeis University
2002-2005 Dean's List, Brandeis University

Invited Talks

2009 "Zero Temperature Limit of Holographic Superconductors," University of Michigan, November 2009.
"Zero Temperature Limit of Holographic Superconductors," Texas A&M, October 2009.
"Zero Temperature Limit of Holographic Superconductors," KITP, October 2009.

"No Dynamics in the Extremal Kerr Throat," KITP, May 2009.

2008 "Holographic Superconductivity," UCSB, October 2008.

Publications

8. G. T. Horowitz and M. M. Roberts, "Zero Temperature Limit of Holographic Superconductors," arXiv:0908.3677 [hep-th].

7. A. J. Amsel, D. Marolf and M. M. Roberts, "On the Stress Tensor of Kerr/CFT," arXiv:0907.5023 [hep-th].

6. A. J. Amsel, G. T. Horowitz, D. Marolf and M. M. Roberts, "No Dynamics in the Extremal Kerr Throat," JHEP **0909**, 044 (2009) [arXiv:0906.2376 [hep-th]].

5. A. J. Amsel, G. T. Horowitz, D. Marolf and M. M. Roberts, "Uniqueness of Extremal Kerr and Kerr-Newman Black Holes," arXiv:0906.2367 [gr-qc].

4. G. T. Horowitz and M. M. Roberts, "Holographic Superconductors with Various Condensates," Phys. Rev. D **78** (2008) 126008 [arXiv:0810.1077 [hep-th]].

3. M. M. Roberts and S. A. Hartnoll, "Pseudogap and time reversal breaking in a holographic superconductor," JHEP **0808** (2008) 035 [arXiv:0805.3898 [hep-th]].

2. G. T. Horowitz and M. M. Roberts, "Counting the Microstates of a Kerr Black Hole," Phys. Rev. Lett. **99** (2007) 221601 [arXiv:0708.1346 [hep-th]].

1. G. T. Horowitz and M. M. Roberts, "Dynamics of first order transitions with gravity duals," JHEP **0702** (2007) 076 [arXiv:hep-th/0701099].

Teaching

2005-2006 Teaching Assistant, Quantum Mechanics, UCSB.

2004-2005 Grader, Quantum Mechanics, Brandeis University.