CURRICULUM VITAE: Aninda Sinha

DOB: 31 March, 1977 <u>Affiliation</u>: Centre for High Energy Physics, Indian Institute of Science, Bangalore 560012, India. <u>Position</u>: Assistant Professor, from December 2010. <u>Phone</u>: +91 80 22932851 <u>Email</u>: asinha@cts.iisc.ernet.in

PROFESSIONAL EXPERIENCE

Postdoctoral fellow, Perimeter Institute for Theoretical Physics, Waterloo, Canada, 2007-2010.
 PPARC postdoctoral fellow and Gonville and Caius college fellow, Cambridge University, UK, 2004-2007.

EDUCATION

1. Don Bosco, Calcutta, 1984-1996. Indian School Certificate.

2. Jadavpur University, Calcutta, 1996-1999. B.Sc., Physics honours (placed first).

3. Cambridge University, UK, 1999-2001. BA, MA, Certificate of Advanced Study in Mathematics–Part III applied mathematics (placed first with distinction); part III essay: Black holes and the AdS/CFT correspondence supervised by Professor Malcolm Perry.

4. Cambridge University, UK, (degree officially conferred 2005). PhD in theoretical physics, advisor Professor Michael Green, DAMTP. Thesis title: Aspects of IIB plane-wave string theory

RESEARCH PUBLICATIONS

$\mathbf{JOURNALS}^1$

- "On generalized gravitational entropy, squashed cones and holography" A. Bhattacharyya, M. Sharma and A. Sinha. arXiv:1308.5748 [hep-th]
- "Whirling waves in interference experiments" R. Sawant, J. Samuel, A. Sinha, S. Sinha and U. Sinha. arXiv:1308.2022 [quant-ph]
- "Entanglement entropy in higher derivative holography"
 A. Bhattacharyya, A. Kaviraj and A. Sinha. arXiv:1305.6694 [hep-th] JHEP 1308, 012 (2013)
- 4. "Entanglement entropy from surface terms in general relativity"
 A. Bhattacharyya and A. Sinha.
 to appear in IJMPD special issue, arXiv:1305.3448 [gr-qc]
 Honourable mention on Gravity Research Foundation 2013 awards on essays on gravitation.

 $^{^{1}*{\}equiv}>100$ cits; $*{\equiv}>50$ cits

- "Entanglement entropy from the holographic stress tensor" A. Bhattacharyya and A. Sinha arXiv:1303.1884 [hep-th]
- "Effect of environmental coupling on tunneling of quasiparticles in Josephson junctions" M. H. Ansari, F. K. Wilhelm, U. Sinha, and A. Sinha arXiv:1211.4745 [cond-mat]
- "On c-theorems in arbitrary dimensions"
 A. Bhattacharyya, L. -Y. Hung, K. Sen and A. Sinha.
 Phys. Rev. D 86, 106006 (2012). arXiv:1207.2333 [hep-th].
- "Quantum corrections to screening at strong coupling" A. Singh and A. Sinha. Nucl. Phys. B 167-189, 864 (2012) arXiv:1204.1817 [hep-th]
- "Counterterms, critical gravity and holography"
 K. Sen, A. Sinha and N. V. Suryanarayana.
 Phys. Rev. D 85, 124017 (2012) arXiv:1201.1288 [hep-th]
- "Implications of a viscosity bound on black hole accretion" A. Sinha and B. Mukhopadhyay Phys. Lett. B 709, 289 (2012) arXiv:1108.5177 [astro-ph.HE]
- "Cavitation in holographic sQGP"
 A. Klimek, L. Leblond and A. Sinha Phys. Lett. B 701, 144 (2011) [arXiv:1103.3987 [hep-th]]
- 12. "New Massive Gravity and AdS₄ counterterms"
 D. P. Jatkar and A. Sinha
 Phys. Rev. Lett. 106, 171601 (2011) [arXiv:1101.4746 [hep-th]]
- 13. "Holographic c-theorems in arbitrary dimensions" * R. C. Myers and A. Sinha JHEP 1101, 125 (2011) [arXiv:1011.5819 [hep-th]]
- 14. "On higher derivative gravity, c-theorems and cosmology" A. Sinha Class. Quant. Grav. 28, 085002 (2011) [arXiv:1008.4315 [hep-th]]
- "Non-relativistic metrics from back-reacting fermions" L. Y. Hung, D. P. Jatkar and A. Sinha Class. Quant. Grav. 28, 015013 (2011) arXiv:1006.3762 [hep-th]
- 16. "Seeing a c-theorem with holography" *
 R. C. Myers and A. Sinha
 Phys. Rev. D 82, 046006 (2010) [arXiv:1006.1263 [hep-th]]
- 17. "Holographic studies of quasi-topological gravity" * R. C. Myers, M. F. Paulos and A. Sinha JHEP 1008, 035 (2010) [arXiv:1004.2055 [hep-th]]

- 18. "On the new massive gravity and AdS/CFT" *
 A. Sinha
 JHEP 1006, 061 (2010) [arXiv:1003.0683 [hep-th]]
- "Holographic GB gravity in arbitrary dimensions" *
 A. Buchel, J. Escobedo, R. C. Myers, M. F. Paulos, A. Sinha and M. Smolkin JHEP 1003, 111 (2010) [arXiv:0911.4257 [hep-th]]
- 20. "Holographic quantum liquids in 1+1 dimensions"
 L. Y. Hung and A. Sinha
 JHEP 1001, 114 (2010) [arXiv:0909.3526 [hep-th]]
- 21. "Non-relativistic metrics with extremal limits"
 E. Imeroni and A. Sinha
 JHEP 0909, 096 (2009) [arXiv:0907.1892 [hep-th]]
- 22. "Holographic Hydrodynamics with a Chemical Potential" * R. C. Myers, M. F. Paulos and A. Sinha JHEP 0906, 006 (2009) [arXiv:0903.2834 [hep-th]]
- "Improving high-T_c dc-SQUID performance by junction asymmetry" U. Sinha, A. Sinha and F. K. Wilhelm Supercond. Sci. Technol. 22 (2009) 055002 [arXiv:0812.4237 [cond-mat]]
- 24. "Beyond $\eta/s = 1/4\pi$ " * A. Buchel, R. C. Myers and A. Sinha JHEP **0903**, 084 (2009) [arXiv:0812.2521 [hep-th]]
- 25. "1/N Effects in Non-Relativistic Gauge-Gravity Duality" *
 A. Adams, A. Maloney, A. Sinha and S. E. Vazquez
 JHEP 0903, 097 (2009) [arXiv:0812.0166 [hep-th]]
- 26. "Universal holographic hydrodynamics at finite coupling" *
 A. Buchel, R. C. Myers, M. F. Paulos and A. Sinha
 Phys. Lett. B 669, 364 (2008) [arXiv:0808.1837 [hep-th]]
- 27. "On quark masses in holographic QCD"
 R. McNees, R. C. Myers and A. Sinha
 JHEP 0811, 056 (2008) [arXiv:0807.5127 [hep-th]]
- 28. "Quantum corrections to η/s" *
 R. C. Myers, M. F. Paulos and A. Sinha Phys. Rev. D 79, 041901 (2009) Rapid Comm. [arXiv:0806.2156 [hep-th]]
- 29. "On transmission line resonances in high T_C dc SQUIDS"
 U. Sinha, A. Sinha and E. J. Tarte
 Supercond. Sci. Technol. 21 (2008) 085021 [arXiv:0806.3187 [cond-mat]]
- 30. "The fast life of holographic mesons"
 R. C. Myers and A. Sinha
 JHEP 0806, 052 (2008) [arXiv:0804.2168 [hep-th]]

- 31. "Black Hole Giants"
 A. Sinha and J. Sonner
 JHEP 0708, 006 (2007) [arXiv:0705.0373 [hep-th]]
- 32. "At the horizon of a supersymmetric AdS(5) black hole: Isometries and half-BPS giants"
 A. Sinha, J. Sonner and N. V. Suryanarayana
 JHEP 0701, 087 (2007) [arXiv:hep-th/0610002]
- 33. "Two-charge small black hole entropy: String-loops and multi-strings" A. Sinha and N. V. Suryanarayana JHEP 0610, 034 (2006) [arXiv:hep-th/0606218]
- 34. "Extremal single-charge small black holes: Entropy function analysis" A. Sinha and N. V. Suryanarayana Class. Quant. Grav. 23, 3305 (2006) [arXiv:hep-th/0601183]
- 35. "Mixing of the RR and NSNS sectors in the BMN limit" M. B. Green, S. Kovacs and A. Sinha Phys. Rev. D 73, 066004 (2006) [arXiv:hep-th/0512198]
- 36. "Non-perturbative effects in the BMN limit of N = 4 supersymmetric Yang-Mills" M. B. Green, S. Kovacs and A. Sinha JHEP 0512, 038 (2005) [arXiv:hep-th/0506200]
- 37. "Warped tachyonic inflation in type IIB flux compactifications and the open-string completeness conjecture"
 D. Cremades, F. Quevedo and A. Sinha JHEP 0510, 106 (2005) [arXiv:hep-th/0505252]
- 38. "Non-perturbative contributions to the plane-wave string mass matrix" M. B. Green, S. Kovacs and A. Sinha JHEP 0505, 055 (2005) [arXiv:hep-th/0503077]
- "On the plane-wave cubic vertex"
 J. Lucietti, S. Schafer-Nameki and A. Sinha Phys. Rev. D 70, 026005 (2004) [arXiv:hep-th/0402185]
- 40. "On the exact open-closed vertex in plane-wave light-cone string field theory" J. Lucietti, S. Schafer-Nameki and A. Sinha Phys. Rev. D 69, 086005 (2004) [arXiv:hep-th/0311231]
- "Oblique and curved D-branes in IIB plane-wave string theory" M. R. Gaberdiel, M. B. Green, S. Schafer-Nameki and A. Sinha JHEP 0310, 052 (2003) [arXiv:hep-th/0306056]
- 42. "Tadpole Analysis Of Orientifolded Plane-Waves" A. Sinha and N. V. Suryanarayana JHEP 0211, 026 (2002) [arXiv:hep-th/0209247]
- 43. "The $\hat{G}^4 \lambda^{16}$ term in IIB supergravity" A. Sinha JHEP **0208**, 017 (2002) [arXiv:hep-th/0207070]

- 44. "Fermion helicity flip in a Kalb-Ramond background"
 S. SenGupta and A. Sinha
 Phys. Lett. B 514, 109 (2001) [arXiv:hep-th/0102073]
- 45. "Does a Kalb-Ramond field make space-time optically active?"
 S. Kar, P. Majumdar, S. SenGupta and A. Sinha
 Eur. Phys. J. C 23, 357 (2002) [arXiv:gr-qc/0006097]

I have a total citation count of 1500 as of September 2013

CONFERENCE PROCEEDINGS

1. "AdS/CFT and sQGP"

A. Sinha Nucl. Phys. A **862-863**, 168 (2011) Invited Plenary contribution in the International Conference on the Physics and Astrophysics of Quark Gluon Plasma, Goa, December 2010.

"Quark Soup: Applied Superstring theory "
 A. Buchel, R. C. Myers and A. Sinha
 Feature article Canadian Journal of Physics, 2010.
 http://www.cap.ca/sites/cap.ca/files/article/1413/apr10-offprint-buchel.pdf

3. "The viscosity bound in string theory"

A. Sinha and R. C. Myers
Nucl. Phys. A 830, 295C (2009) [arXiv:0907.4798 [hep-th]]
Contributed to Quark Matter 2009: 21st International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions (QM2009), Knoxville, Tennessee, 30 Mar - 4 Apr 2009

- 4. "The fast life of holographic mesons"
 R. C. Myers and A. Sinha Proceedings of Continuous Advances in QCD 2008, University of Minnesota, Minneapolis, USA, May 15-18 2008; ed., M. Peloso.
- "The fast life of holographic mesons"
 A. Sinha and R. C. Myers
 J. Phys. G: Nucl. Part. Phys. 35 104062.
 Proceedings for Quark Matter 2008, 20th International conference on ultra-relativistic nucleus nucleus collisions.
- 6. "Non-perturbative contributions in the plane-wave / BMN limit"
 M. B. Green, S. Kovacs and A. Sinha arXiv:hep-th/0510166
 Contributed to Einstein Symposium 2005, Alexandria, Egypt, 4-6 Jun 2005

ACADEMIC RECOGNITION

- 1. Elected as Simons associate, International Centre for Theoretical Physics, Trieste, Italy, 2014-2019.
- Associate faculty at International Centre for Theoretical Sciences (TIFR) Bangalore, India, 2014-2017.

- 3. Honourable mention in the Gravity Research Foundation 2013 Awards for Essays on Gravitation.
- 4. Visiting researcher, Perimeter Institute, Waterloo, Canada Sep 2011- Feb 2012.
- 5. Ramanujan fellowship, Department of Science and Technology, Govt. of India, 2010-.
- 6. PPARC national postdoctoral fellowship held at DAMTP, Cambridge (2004-2007). The PPARC fellowship was won in a national competition for all branches in particle physics where 14 were awarded nationwide.
- 7. Gonville and Caius college post-doctoral research fellowship, Cambridge (2004-2007). The Gonville and Caius fellowship was open to all branches of academia and 2 were given that year. I had the privilege of having two concurrent fellowships.
- 8. Rayleigh-Knight essay prize, DAMTP, Cambridge, 2003 for essay based on PhD work written during my 2nd year PhD.
- 9. Gates scholarship 2001-2004 for PhD at DAMTP, Cambridge. Typically around 100 scholars are chosen every year from around 10000 applicants worldwide.
- 10. Perse scholarship, Gonville and Caius college, 2001-2003 for being one of the best 5 PhD applicants.
- 11. Matthews' scholarship, 2003-2004 for outstanding ongoing PhD work.
- 12. Overseas Research Students award scheme, 2001-2004.
- 13. Mayhew prize, 2001 for mathematics tripos part III, Cambridge for top mark in applied mathematics in the university. URL: http://en.wikipedia.org/wiki/Mayhew_Prize. My part III essay "Black holes and the AdS/CFT correspondence" supervised by Professor Malcolm Perry was awarded 100% marks.
- 14. Tutorial prize, St. Edmund's College for outstanding performance in part III.
- 15. Tutorial prize for outstanding performance in Natural Sciences Tripos II with experimental and theoretical physics, Cambridge, 2000. Top mark in theoretical physics I (95%) and theoretical physics II (100%)exams.
- 16. Nehru Chevening scholarship, Cambridge, 1999-2001 to pursue masters studies in Cambridge.
- 17. Placed 1st in Ph.D. entrance examination (Joint Entrance Screening Test) organized all over India, 1999.
- 18. 1st class 1st with distinction in Bachelor of Science, '96-'99, Jadavpur University, Calcutta, India. University gold medal for standing first in order of merit, Sibapriya Chatterjee memorial bronze medal for standing first in physics, D.N. Dey memorial gold medal for highest aggregate marks.
- 19. 2nd prize in Inter-University scientific model competition, 1998-99. Project dealt with data-encryption using synchronized chaos.
- 20. Surjit Singh Memorial gold medal for standing 1st in Indian Certificate of Secondary Examination (equivalent to GCSE), from Don Bosco, Calcutta, 1994.

TALKS and SEMINARS

- 1. The Schwinger computation in Quantum Electrodynamics and its relevance to topological string theory Student seminar, Cambridge, May 2002.
- 2. B.N. Majumdar memorial lecture–Higher derivative corrections in type IIB supergravity Indian Association for the Cultivation of Science, Calcutta, September 2002.
- 3. Oblique D-branes in type IIB string theory Student seminar, Cambridge, March, 2003.
- 4. Oblique and curved D-branes in type IIB string theory Invited talk, Indian Association for the Cultivation of Science, Calcutta, April 2003.
- 5. Oblique and curved D-branes in type IIB string theory Invited talk, Saha Institute of Nuclear Physics, Calcutta, April 2003.
- 6. On the exact open-closed vertex in plane-wave light-cone string field theory. Given at the annual string theory workshop, IIT Kanpur, India, 2003 December.
- 7. Neumann matrices in plane-wave string theory. 3 talks in Cambridge, 2004 February-March.
- 8. Non-perturbative effects in the plane-wave/BMN limit of AdS/CFT. Invited seminar, Queen Mary College, London, 2005 June.
- 9. Non-perturbative effects in the plane-wave/BMN limit of AdS/CFT. Invited seminar, IACS, Kolkata, 2006 January.
- 10. Extremal single-charge small black holes. Invited seminar, IACS, Kolkata, 2006 January.
- 11. Extremal single-charge small black holes. String seminar, DAMTP, Cambridge, 2006 January.
- 12. Extremal single-charge small black holes. Invited seminar, Kings college, London, 2006 February.
- 13. Extremal single-charge small black holes. Eurostrings–European Strings Network international conference 2006, Cambridge, 2006 April.
- 14. Small black holes in string theory. String seminar, Caltech, 2006 September.
- 15. Small black holes in string theory. String seminar, UCLA, 2006 October.
- 16. Small black holes in string theory: Some puzzles. String seminar, UC Berkeley, 2006 October.
- 17. Small black holes in string theory: Some puzzles. Duality seminar, Harvard, 2006 October.
- 18. Black hole giants, Ecole Normale, Paris, February 2007.
- 19. Black hole giants, Perimeter, March 2007.
- 20. Black hole giants, Cambridge, April 2007.
- 21. Black hole giants, Durham, April 2007.
- 22. String group seminar, Perimeter, November 2007.
- 23. Parallel talk "The fast life of holographic mesons", Quark Matter 2008, 20th international conference on ultra-relativistic nucleus-nucleus collisions, Jaipur, India, February 2008.

- 24. Invited talk "The fast life of holographic mesons", IACS, Kolkata, February 2008.
- 25. Invited talk "Quantum corrections to η/s ", Emerging Directions in String Theory, Banff, Canada, June 2008.
- 26. Invited talk "Holographic hydrodynamics at finite coupling", Cambridge, UK, September 2008.
- 27. Invited talk "Holographic hydrodynamics at finite coupling", Imperial College, UK, September 2008.
- 28. Invited talk "Holographic hydrodynamics at finite coupling", Strings and gauge theories workshop, University of Michigan, USA, September 2008.
- 29. Invited talk "Holographic hydrodynamics at finite coupling", McGill, Canada, October 2008.
- 30. Invited talk "Holographic hydrodynamics at finite coupling", Indian Strings Meeting 2008, Pondicherry, India, December 2008.
- 31. Invited talk "Two lessons from higher derivative gravity", IISc, Bangalore, December 2008.
- 32. Invited talks "The viscosity bound in string theory", SINP and VECC, Kolkata, December 2008.
- 33. Invited talk "The viscosity bound in string theory", TIFR, Mumbai, January 2009.
- 34. Journal club "Something about shear viscosity", Perimeter, Canada, February 2009.
- 35. Invited talk "The viscosity bound in string theory", Harvard, USA, February 2009.
- Invited talk "The viscosity bound in string theory", Michigan Center for Theoretical Physics, USA, March, 2009.
- 37. Parallel talk "The viscosity bound in string theory", Quark Matter 2009, 21st international conference on ultra-relativistic nucleus-nucleus collisions, ORNL, Knoxville, USA, April 2009.
- Invited talk "Constraining eta/s in string theory", University of Illinois, Urbana-Champaign, USA, December, 2009.
- 39. Invited colloquium "AdS/CFT and sQGP", HRI, Allahabad, India, February, 2010.
- 40. Invited talk, "Anomalies, central charges and holography", HRI, Allahabad, India, February, 2010.
- Invited talk, "Anomalies, central charges and holography", DAMTP, Cambridge, AdS/CFT conference, March 2010.
- 42. Invited talk, "Non-relativistic metrics from back-reacting fermions," AdS/CFT conference, McGill, Canada, June 2010.
- 43. Invited talk, "c theorems in higher derivative gravity", University of Kentucky, USA, August 2010.
- 44. Invited talk, "c theorems in higher derivative gravity", Princeton University, USA, September 2010.
- 45. Invited **plenary** talk at the International Conference on Physics and Astrophysics of the Quark Gluon Plasma (ICPAQGP) 2010, Goa, India, December 2010.
- 46. Invited talk, "Holographic c theorems in arbitrary dimensions", Indian Strings Meeting (international edition), Puri, India, January 2011.

- 47. Invited talk, "New massive gravity and AdS/CFT", IACS, Kolkata, May 2011.
- 48. Invited talk, "Astrophysical implications of a viscosity bound," ICTS, Bangalore, June 2011.
- 49. Invited talk, "Critical gravity from the AdS boundary," SPOCK meeting, University of Cincinnati, Nov 2011.
- 50. Invited talk, "Critical gravity from the AdS boundary," Perimeter Institute, Nov 2011.
- 51. Invited review talk, "Status of the viscosity bound," 3rd Indian-Israeli strings meeting, Institute for Advanced Studies, Hebrew University, Jerusalem, Feb 2012.
- 52. Invited talk, "Counterterms, critical gravity and holography," 3rd Indian-Israeli strings meeting, Institute for Advanced Studies, Hebrew University, Jerusalem, Feb 2012.
- 53. Invited talk, "Status of the viscosity bound," Perimeter Institute, Feb 2012.
- 54. Invited talk, "Fluctuating surfaces, black hole entropy and c-theorems in odd dimensions," IACS, May 2012.
- 55. Invited colloquium, "The strongly coupled quark gluon plasma and AdS/CFT," TIFR, May 2012.
- 56. Invited talk, "c-theorems in arbitrary dimensions," ICTS, Bangalore, June 2012.
- 57. Invited talk, "c-theorems in arbitrary dimensions," IMSc, Chennai, July 2012.
- 58. Invited talk, "RG flows, entanglement entropy and c-theorems," IISc, CHEP symposium, November 2012.
- 59. Invited talk, "RG flows, entanglement entropy and c-theorems," ISM, Puri, December 2012.
- 60. Invited talk, "Derivations of holographic entanglement entropy," 7th regional meeting, Crete, Greece, June 2013.
- Invited talk, "Entanglement in holography," 2-day meeting on firewalls, ICTS, Bangalore, September 2013.

TEACHING EXPERIENCE

- Lecturing Quantum Field Theory-I (48 hours), IISc graduate course, Aug-Dec 2013.
- Lectured Quantum Field Theory-I (48 hours), IISc graduate course, Aug-Dec 2012.

• Lectured Advanced Mathematical Methods in Physics (total 48 hours), IISc graduate course, Jan-Apr 2011.

• Lectured (total 1.5 hours) on "Strings vs particles. Branes and Holography in quantum gravity" for New Horizons in Fundamental Physics course coordinated by Freddy Cachazo for 4th year undergraduates in Universities of Waterloo and Guelph students held at Perimeter, March 2008.

- Supervised part II electrodynamics, Michaelmas term, Cambridge 2005-2006.
- Supervised part IB mathematical methods, Michaelmas term, Cambridge 2004-2005.

• Supervised part IB quantum mechanics (mathematics) for students of Gonville and Caius College, Michaelmas term, Cambridge, 2003-2004.

• Supervised part III string theory examples classes for a course given by Michael Green, Lent term, Cambridge, 2003.

• Supervised part III quantum field theory examples classes for a course given by Ian Drummond, Michaelmas term, Cambridge, 2002-2003.

• Supervised Dalibor Hrg and James Ettle for IUSS project entitled "Data encryption using chaos," Institute of Astronomy, Cambridge, 2002.

• Supervised part III string theory examples classes for a course given by Peter Goddard, Lent term, Cambridge, 2002.

Students and postdocs supervision

PhD:

• Apratim Kaviraj for PhD, IISc, 2011-.

• Kallol Sen and Arpan Bhattacharyya for PhD, IISc, Dec 2010-.

• Co-supervised Ajay Singh and Jorge Escobedo, both PhD students at University of Waterloo/Perimeter Institute, 2008 with Robert C. Myers on 2 research papers.

Masters:

• Supervising Aravind HV, Sandesh Bhat (IISER Pune), Surya Kiran (BITS Goa) for Masters 2013.

Project:

Shinjini Basu (M.S. IIT Kanpur), August 2013-. Postdoc mentee:

- Menika Sharma (PhD, Arizona) June 2012-July 2013.
- Shubho Roy (PhD, Brown) Oct 2012-.

Summer:

• Supervised Aravind HV, Sandesh Bhat (IISER Pune), Surya Kiran (BITS Goa), Sridip Pal (IISER, Kolkata) and Apratim Kaviraj (IISc), Summer 2012.

• Supervised Aravind HV, Sandesh Bhat (IISER, Pune) and Abhiram MK (Univ. Nottingham, UK) during summer 2011.

• Co-supervised Aleksandra Klimek for a summer project with Louis Leblond in Perimeter Institute during 2010 which resulted in a publication in Physics Letters B.

Misc:

• Suggested and advised on a research project to Janet Hung and Linda Uruchurtu (both PhD students of Michael Green in Cambridge) which resulted in a publication in JHEP, 2007.

• Suggested and advised on a research project to Miguel Paulos (a PhD student of Michael Green in Cambridge, 2007-) at the start of his PhD on which he has already successfully written several papers.

ORGANIZATIONAL EXPERIENCE

- In charge of string seminars, DAMTP, 2004-2005.
- Co-organized Eurostrings 2006, Cambridge, April 2006.
- In charge of string seminars, Perimeter, 2007-2008.
- Organized Math-Phys seminars, IISc, 2012.
- Co-organized the Subrahmanian Chandrasekhar lectures, ICTS Bangalore, September 2012.

• Co-organized Winter school on Quantum Computing and Quantum Information, ICTS Bangalore January 2013.

• Organized workshop on "Non-perturbative gauge theories and holography," IISc Bangalore January 2013.

OTHER ACADEMIC ACTIVITIES

Referee for Physical Review Letters, JHEP, Physical Review D, Physical Review B, Nuclear Physics B, Physics Letters B, Classical and Quantum Gravity, Foundations of Physics, MPLB, IJMPA, Indian Journal of Physics, Canadian Journal of Physics.

Co-editor special issue on Applications of AdS/CFT, Advances in High Energy Physics.

REFERENCES

Professor Michael B. GreenProfessor Fernando QuevedoDAMTP, University of CambridgeDAMTP, University of CambridgeWilberforce Road,Wilberforce RoadCambridge CB3 0WA, UK.Cambridge CB3 0WA, UK.m.b.green@damtp.cam.ac.ukf.quevedo@damtp.cam.ac.uk

Professor Robert C. Myers Perimeter Institute, 31 Caroline St. North, Waterloo N2L 2Y5, Canada. rmyers@perimeterinstitute.ca DAMTP, University of Cambridge Wilberforce Road Cambridge CB3 0WA, UK. <u>f.quevedo@damtp.cam.ac.uk</u> Professor Ashoke Sen Harish Chandra Research Institute

Harish Chandra Research Institute, Chhatnag Road, Jhusi, Allahabad 211 019, India sen@mri.ernet.in