

## Curriculum Vitae: David A. Lowe

### (i) Professional Preparation:

- Corpus Christi College, Cambridge University, England.  
B.A. in Natural Sciences (Physics), 1988, 1st Class Honors.

- Princeton University  
Ph.D. in Physics, 1993.  
Dissertation: Aspects of two-dimensional quantum gravity.

### (ii) Appointments:

- Associate Professor, Department of Physics, Brown University, 2003–present.

- Assistant Professor, Department of Physics, Brown University, 1997–2003.

- Senior Research Fellow, California Institute of Technology, 1996–1997.

- Postdoctoral Research Associate, University of California, Santa Barbara, 1993–1996.

### (iii) Publications:

#### (i) Five recent publications:

1) *Comments on the black hole information problem*, Larus Thorlacius, David A. Lowe, Phys.Rev.D73:104027,2006.

2) *Local bulk operators in AdS/CFT: A Boundary view of horizons and locality*, Alex Hamilton, Daniel Kabat, Gilad Lifschytz, David A. Lowe, Phys.Rev.D73:086003,2006

3) *q-deformed de Sitter / conformal field theory correspondence*. David A. Lowe, Phys.Rev.D70:104002,2004

4) *A New twist on dS / CFT*. Alberto Guijosa and David A. Lowe, Phys.Rev.D69:106008,2004

5) *Real time perturbation theory in de Sitter space*. Kevin Goldstein and David A. Lowe, Phys.Rev.D69:023507,2004.

#### (ii) Five other significant publications:

1) *Initial State Effects On The Cosmic Microwave Background And Trans-planckian Physics*, Kevin Goldstein, David A. Lowe, Phys.Rev.D67:063502,2003; hep-th/0208167

2) *Black Hole Complementarity Versus Locality*, David A. Lowe, Joseph Polchinski, Leonard Susskind, Larus Thorlacius, John Uglum; Phys.Rev.D52:6997-7010,1995, hep-th/9506138

3) *N=2 Supersymmetric Gauge Theories, Branes And Orientifolds*, Karl Landsteiner, Esperanza Lopez, David A. Lowe. Nucl.Phys.B507:197-226,1997;

hep-th/9705199

4) *Heterotic Matrix String Theory*, David A. Lowe, Phys.Lett.B403:243-249,1997; hep-th/9704041

5) *Macroscopic And Microscopic Entropy Of Near Extremal Spinning Black Holes*, J.C. Breckenridge, D.A. Lowe, Robert C. Myers, A.W. Peet, A. Strominger, C. Vafa; Phys.Lett.B381:423-426,1996; hep-th/9603078

**(iv) Synergistic Activities:**

- Innovation in teaching: application of JiTT methods in graduate and undergraduate physics courses
- Distance learning: developed a program that shares advanced graduate courses via videoconference

**(v) Collaborators & Other Affiliations**

**(a) Collaborators and Co-Editors:**

Michael Abbott (Brown), Gian Luigi Alberghi (U. of Bologna), Richard Brower (Boston U.), Elena Caceres (CINVESTAV), Steven Corley (Brown), Kamran Diba (Caltech), Kevin Goldstein (Brown), Alberto Guijosa (UNAM), Alexander Hamilton (Columbia), Norihiro Iizuka (Columbia), Daniel Kabat (Columbia), Gilad Lifschytz (U. of Haifa), Donald Marolf (UCSB), Jeff Murugan (Brown), Horatiu Nastase (Brown), Sanjaye Ramgoolam (Brown), Chung-I Tan (Brown), Larus Thorlacius (U. of Iceland).

**(b) Graduate and Postdoctoral Advisors:**

John Schwarz (California Institute of Technology), Andrew Strominger (Harvard), Alexander Polyakov (Princeton), Igor Klebanov (Princeton).

**(c) Thesis Advisor and Postgraduate-Scholar Sponsor:**

**Postdoctoral researchers:**

Steven Corley (Brown), Robert McNees (Brown), Jeff Murugan (Brown), Horatiu Nastase (Brown), Sanjaye Ramgoolam (Brown)

**Students:**

Kamran Diba (Ph.D., 1997-2001, now Assist. Prof. (res) at Rutgers U.), Kevin Goldstein (Ph.D. 2004, now postdoc at TATA Institute), Michael Abbott (Ph.D. candidate), Shubho Roy (Ph.D. candidate).

**(vi) Grants and awards:**

03 — 07, NSF United States-Mexico Cooperative Research Grant, PI \$40000

01 — 05, United States-Israel Binational Science Foundation Grant, co-PI \$40000

97 — present, DOE grant, co-PI \$400000

99, Richard B. Salomon Faculty Research Award