

HARSH MATHUR

CURRICULUM VITAE

Nov 9, 2008

Department of Physics
Case Western Reserve University
Cleveland, Ohio 44106-7079
phone: 216 368 4009
fax: 216 368 4671
email: hxm7@case.edu

Education

Ph.D., Yale University (Physics), 1994.

M. Phil, Yale University (Physics), 1989.

B. Tech, Indian Institute of Technology, Kanpur, India (Electrical Engineering), 1987.

Experience

Associate Professor, Case Western Reserve University,
July 2001—present;

Warren Rupp Assistant Professor, Case Western Reserve University,
July 99—June 2001;

Assistant Professor, Case Western Reserve University,
Sept 95—Jul 2001;

General Member, Institute for Theoretical Physics, University of
California at Santa Barbara, Feb—May 96;

Postdoctoral Member of the Technical Staff, Bell Laboratories,
Murray Hill, Nov 93—Aug 95.

Awards:

1996-2000 Alfred P. Sloan Foundation Fellow

1992-93 IBM Predoctoral Fellow

Publications (past year):

- [1] “Revisiting Pollock’s drip paintings”, Katherine Jones-Smith and Harsh Mathur, *Nature* **444**, doi:10.1038/nature05398 (2006).
- [2] “Level spacings in random matrix theory and Coulomb blockade peaks in Quantum Dots”, Damir Herman, T. Tzen Ong, Gonzalo Usaj, Harsh Mathur and Harold U. Baranger, *Phys Rev* **B 76**, 195448 (2007).
- [3] “Quantized non-Abelian monopoles on S^3 ”, Irit Maor, Harsh Mathur and Tanmay Vachaspati, *Phys Rev* **D 76**, 105013 (2007).
- [4] “A Nearly Scale Invariant Spectrum of Gravitational Radiation from Global Phase Transitions”, Katherine Jones-Smith, Lawrence Krauss and Harsh Mathur, *Phys Rev Lett* **100**, 131302 (2008).
- [5] “Drip Paintings and Fractal Analysis”, Katherine Jones-Smith, Harsh Mathur and Lawrence M. Krauss, submitted to *Phys Rev* **E**; available at arXiv:0710.4917
- [6] “Non-exponential tunneling and control of microwave absorption line-shapes via Fano resonance for electrons on Helium”, Solomon Duki and Harsh Mathur, submitted to *Phys Rev Lett*; available at arXiv:0804.2210

Relevant Professional Activities (past year):

- Served on review panel for National Science Foundation, Division of Materials Research, Arlington Va, Jul 12-13, 2007.
- Invited talk on Fractals and Art at American Association of Physics Teachers Annual Meeting, Greensboro, NC, Aug 2007.
- Seminar at Duke University, Physics Department, on Fractals and Jackson Pollock, Aug 2007.
- Invited participant at Study Day for Scholars at the Pollock Matters exhibition at the McMullen Museum of Art, Boston College, Nov 2007.
- Seminar at University of Massachusetts, Amherst, Physics Department, on Fractals and Pollock, Dec 12, 2007.
- Invited participant in upcoming workshop on “Cosmic Microwave Background: Theory and Foregrounds”, at Fermi National Accelerator Laboratory, Illinois, June 23-26, 2008.