
ALISON J. FARMER

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Date of birth: January 6, 1979

Nationality: British

EDUCATION

Visitor at the INSTITUTE FOR ADVANCED STUDY, Princeton 2004 – 2005

PhD in Astrophysics, CALIFORNIA INSTITUTE OF TECHNOLOGY 2000 – 2005

Thesis: “Adventures in Theoretical Astrophysics”

Advisor: Professor Peter Goldreich

Defended; PhD to be conferred June 2005

BA and MSci in Natural Sciences, PEMBROKE COLLEGE, 1996 – 2000
UNIVERSITY OF CAMBRIDGE

Tripas Parts IA, IB, II and III: First Class Honours

Specialization: Experimental and Theoretical Physics

AWARDS AND HONORS

Robert Benjamin Leighton Fellowship, Caltech 2000 – 2004

BAE Systems / Sir Nevill Mott Prize for Physics, University of Cambridge 2000

Kilby Prize for best undergraduate performance, Pembroke College 2000

Hartree & Clerk Maxwell Prizes for Physics, University of Cambridge 1999

Dr. Stevens’ Prize for Natural Sciences, Pembroke College 1999

Pembroke College Foundation Scholarship 1998 – 2000

Foundress’ Prize, Pembroke College 1998

Pembroke College Scholarship 1997 – 1998

Satish Kumar Agarwal Prize for Natural Sciences, Pembroke College 1997

Pembroke College Prize 1997

Nuffield Science Bursary, Royal Observatory, Edinburgh 1995

RESEARCH INTERESTS

Solving astrophysical mysteries and understanding physical processes through the application of physics, with emphasis on becoming a general-purpose astrophysical theorist.

TEACHING EXPERIENCE

Teaching Assistant, Introductory Astronomy, Caltech	2002
Teaching Assistant, Galaxies and Cosmology, Caltech	2002
Teaching Assistant, Basic Astronomy and the Galaxy, Caltech	2001

PUBLICATIONS

- **A. J. Farmer**, P. Goldreich, “Wave Damping by Magnetohydrodynamic Turbulence and Its Effect on Cosmic-Ray Propagation in the Interstellar Medium”, *Astrophysical Journal* (2004) 604, 671
- A. Cooray, **A. J. Farmer**, N. Seto “The Optical Identification of Close White Dwarf Binaries in the Laser Interferometer Space Antenna Era”, *Astrophysical Journal Letters* (2004) 601, 47
- **A. J. Farmer**, E. S. Phinney, “The gravitational wave background from cosmological compact binaries”, *Monthly Notices of the Royal Astronomical Society* (2003) 346, 1197
- **A. J. Farmer**, E. Agol, “Finding White Dwarfs with Transit Searches”, *Astrophysical Journal* (2003) 592, 1151
- T. J. Pearson, B. S. Mason, A. C. S. Readhead, M. C. Shepherd, J. L. Sievers, P. S. Udomprasert, J. K. Cartwright, **A. J. Farmer**, S. Padin, S. T. Myers, and 16 coauthors, “The Anisotropy of the Microwave Background to $l = 3500$: Mosaic Observations with the Cosmic Background Imager”, *Astrophysical Journal* (2003) 591, 556
- B.S. Mason, T. J. Pearson, A. C. S. Readhead, M. C. Shepherd, J. Sievers, P. S. Udomprasert, J. K. Cartwright, **A. J. Farmer**, S. Padin, S. T. Myers, and 16 coauthors “The Anisotropy of the Microwave Background to $l = 3500$: Deep Field Observations with the Cosmic Background Imager”, *Astrophysical Journal* (2003) 591, 540
- A. Cooray, **A. J. Farmer**, “Occultation Searches for Kuiper Belt Objects” *Astrophysical Journal Letters* (2003) 587, 125

PROFESSIONAL AFFILIATIONS

- Junior Member of the American Astronomical Society, 2000 – present
- Associate Member of the Institute of Physics, 2000 – present
- Undergraduate Member of the Institute of Physics, 1996 – 2000