

JO DUNKLEY

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Research

- 2016-present Professor, Departments of Physics and Astrophysical Sciences, Princeton University
Senior Beecroft Fellow, visitor at University of Oxford
- 2007-2016 Faculty member, Department of Physics, University of Oxford
Professor of Astrophysics (2014-2016)
Associate Professor (2012-2014)
RCUK Academic Fellow (2007-12)
Fellow at Exeter College (2007-15)
- 2007-2008 Visiting Research Fellow, Princeton University
2006-2007 Post-doctoral Research Fellow, Princeton University, Physics and Astrophysical Sciences, with
Profs David Spergel and Lyman Page

Education

- 2002-2005 University of Oxford, Department of Physics and Magdalen College
DPhil in Astrophysics 2005; Advisor: Pedro Ferreira
Modern methods for cosmological parameter estimation: Beyond the adiabatic paradigm
- 1997-2001 University of Cambridge, Trinity Hall
MSci Hons with First Class, Natural Sciences (Theoretical Physics)

Prizes and Awards

- 2016 *Rosalind Franklin Award and Lecture*, Royal Society
2015 *Wolfson Merit Award*, Royal Society
2015 *Philip Leverhulme Prize*, Leverhulme Trust, UK
2014 *Fowler Prize*, Royal Astronomical Society, UK
2013 *Maxwell Medal and Prize*, Institute of Physics, UK
2012 *Gruber Prize for Cosmology*, shared with the WMAP team
2010 *Starting Grant*, European Research Council
2007 *NASA Group Achievement Award*, shared with the WMAP team

Major collaborations and leadership

- 2016-present Member of the DoE/NSF CMB-Stage 4 Concept Definition Taskforce
2016-present Chair of the Science Committee, Simons Observatory
2016-present Member of Guiding Board of the Atacama Cosmology Telescope
2013-present Full Member of Dark Energy Science Collaboration for LSST
2009-2015 Core Team and Planck Scientist for ESA's Planck satellite, High Frequency Instrument
2007-present Member of the Atacama Cosmology Telescope science team
2007-2012 Member of NASA's WMAP science team.

Advising of students and postdocs

- Thesis advisor Naomi Robertson (2015-19), Ben Thorne (2015-19), Rupert Allison (2012-16); Thibaut
Louis (2011-14); Graeme Addison (2009-12); Renee Hlozek (2008-11)
Project advisor Siddharth Mishra-Sharma (2016-17), Heather Prince (2016-17), Zack Li (2016-17)

Senior thesis	Boryana Hadzhiyska (2016), Jane Saldanha (2013), Justin Alsing (2012), Mike Wilson (2012), Tom Collett (2011) [pre-2016 these were Oxford Masters projects]
Post-doc advisor	Simone Aiola (2016-19), Mat Madhavacheril (2016-19), Thibaut Louis (2014-15), David Alonso (2013-17), Sigurd Naess (2012-16), Erminia Calabrese (2011-15), Charmaine Armitage-Caplan (2009-13).

Teaching

2016-17	PHY104 (Electricity and Magnetism), Spring 2017, Princeton
2008-15	Tutorial fellow at Exeter College, Oxford. I taught tutorials for physics undergraduates, including Classical Mechanics, Special Relativity, Optics, Statistical Mechanics, Thermodynamics, Stellar Astrophysics, Cosmology, General Relativity.
2010-16	Graduate lectures on the Cosmic Microwave Background, Oxford
2011, 2016	Lecturer for third-year (upper level) undergraduate cosmology course, Oxford

Institutional responsibilities

2016-17	Graduate Admissions Committee, Physics Department, Princeton
2011-13, 2015-16	Equality and Diversity Committee, Department of Physics, Oxford
2012	Professorial hiring committee, Department of Physics, Oxford
2010-13	Founder and coordinator of Oxford Astrophysics undergraduate summer program
2008-16	Service every 2-3 years on graduate admissions committee, Oxford Astrophysics
2008-15	Yearly physics undergraduate admissions committee, Exeter College, Oxford.

Professional activities

2014-16	Rutherford Fellowship panel, STFC, UK
2012-16	Committee member, Education, Training and Careers committee, STFC, UK
2011-present	Editorial Board, Journal of Cosmology and Astroparticle Physics
2010-present	External PhD viva examiner: S. Harper (Manchester, UK), A. Avilez (Nottingham, UK), C. Clark (Imperial, UK), I. Sollom (Cambridge, UK), N. Groeneboom (Oslo, Norway)
2008-present	Evaluator and referee: DoE grants, STFC grants and fellowships, Royal Society fellowships, South African, Swiss and Netherlands research council grants; ApJ, PRD, PRL, JCAP, MNRAS

Public outreach highlights

- Interviewed on TV, radio, print (including BBC News, BBC World, Radio 4 Today, Radio 4 Material World, Radio 3 Free Thinking, Sky News, BBC website, New Scientist, major UK broadsheets) about WMAP, Planck, and other topics.
- TV appearances on PBS *Genius by Stephen Hawking* 2016, BBC *Stargazing Live* and BBC *Science Club*, 2013.
- Major public talks include Royal Society Rosalind Franklin Lecture 2016, York Festival of Ideas 2016, European AstroFest 2015, Invention of Modern Science (Sheldonian Theatre) 2014, New Scientist Live 2014, British Science Festival 2014.
- Lectures for high-school students: Linacre Institute summer school (2014-16), and UNIQ physics school (2012, 2016)
- Lead instructor for week-long QUEST professional development course on the Universe for science teachers, run by Princeton University. Full development of course materials (July 2008 and 2009)

Presentations

I am regularly invited to speak on my work, and give typically one or two invited talks each month. In the past few years this has included Harvard, Rutgers, Santa Barbara, SLAC/Stanford, McGill, Toronto and Yale in North America; and Brussels, Cambridge, Cardiff, Durham, Geneva, Imperial, Lausanne, Liverpool, Madrid, Manchester, Munich, Oxford, Paris, Rome, Stockholm, Tokyo, Trieste, UCL, and Zurich internationally.