

JO DUNKLEY

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Research

- 2016-present Professor, Departments of Physics and Astrophysical Sciences, Princeton University
- 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

Two 8-month maternity leaves during academic years 2013-14 and 2017-18

Education

- 2002-2005 University of Oxford, Department of Physics and Magdalen College
PhD 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

- 2019 *New Horizons in Physics Prize*, shared with Samaya Nisanke and Kendrick Smith
- 2019 Appointed *Officer of the Order of the British Empire (OBE)*
- 2018 *Gruber Prize for Cosmology*, shared with the Planck team
- 2017 *Breakthrough Prize in Fundamental Physics*, shared with the WMAP team
- 2016 *Rosalind Franklin Award and Lecture*, Royal Society, UK
- 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
- 2007 *NASA Group Achievement Award*, shared with the WMAP team

Major Collaborations

- 2016-present Member of Simons Observatory collaboration, and member of Planning Committee
- 2016-2019 Chair of the Simons Observatory Theory and Analysis Committee
- 2016-present Member of Guiding Board of Atacama Cosmology Telescope
- 2007-present Member of the Atacama Cosmology Telescope collaboration
- 2016-2017 Member of the DoE/NSF CMB-Stage 4 Concept Definition Taskforce
- 2017-present Ombudsperson of the Dark Energy Science Collaboration for the Vera Rubin Observatory
- 2013-present Full Member of Dark Energy Science Collaboration
- 2009-2015 Core Team member and Planck Scientist for ESA's Planck satellite
- 2007-2012 Member of NASA's WMAP science team.

Public Outreach Highlights

- Published popular science book *Our Universe: An Astronomer's Guide* (2019), by Penguin (UK) and Harvard University Press (US). Media engagements (radio, print, TV, podcasts, lectures), including CBC The Current, BBC Radio 4 Infinite Monkey Cage and Start the Week, Evening Standard profile, Guardian Review article, Economist and Guardian Science podcasts.
- Interviewed on TV, radio, print (including NPR, 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 in cosmology.
- TV appearances on *Channel 4 Sunday Brunch* 2019, *PBS Genius by Stephen Hawking* 2016, *BBC Stargazing Live* and *BBC Science Club*.
- Major public talks include Sydney Opera House 2020, Hay-on-Wye 2019, Royal Institution 2019, 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.

Supervision of students and postdocs

Post-doc advisor	Adri Duivenvoorden (2019-), Andrina Nicola (2018-), Simone Aiola (2016-18), 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).
Thesis advisor	Heather Prince (2018-21), Zack Li (2018-21), Emilie Storer (2017-22), Naomi Robertson (2015-19), Ben Thorne (2015-19), Rupert Allison (2012-16); Thibaut Louis (2011-14); Graeme Addison (2009-12); Renée Hlozek (2008-11)
Project advisor	Roohi Dalal (2019-20), Siddharth Mishra-Sharma (2016-17)
Undergrad project	Jake Helton (2020), Aizhan Akhmetzhanova (2019-20), Hector Cruz (2019-20), Michelle Baird (2018), Camille Liotine (2018), Boryana Hadzhiyska (2016-17), Jane Saldanha (2013-14), Justin Alsing (2011-12), Mike Wilson (2011-12), Tom Collett (2010-11)

Teaching

2016-20	AST203, Introduction to the Universe, non-majors, Princeton PHY104, Electricity, Magnetism and Optics, 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	Annual graduate lectures on the Cosmic Microwave Background
2011, 2016	Lecturer for third-year cosmology course (physics majors), Oxford University

Professional and Institutional Responsibilities

2018-20	Chair, Climate Committee, Astrophysics Department, Princeton
2016-20	Graduate Admission committee, Physics Department, Princeton
2014-16	Rutherford Fellowship panel, STFC, UK
2012-16	Committee member, Education, Training and Careers committee, STFC, UK
2011-16	Equality and Diversity committee, Department of Physics, Oxford
2011-20	Editorial Board, Journal of Cosmology and Astroparticle Physics
2008-present	Evaluator and referee: DoE and NSF grants, STFC grants and fellowships, Royal Society fellowships, South African, Swiss and Netherlands research council grants; ApJ, PRD, PRL, JCAP, MNRAS