

Mathew James Owens

Present appointments:

Aug 2017 – present: Professor of Space Physics, Dept. of Meteorology, University of Reading
Sept 2010 – present: Visiting lecturer, Dept. of Physics, Imperial College London.

Previous appointments:

Apr 2010 - Aug 2017: Lecturer/Assoc. Prof, Department of Meteorology, University of Reading
Jan 2010 - Apr 2010: Lecturer, Institute of Maths and Physics, Aberystwyth University
Jun 2008 - Dec 2010: Research associate, Department of Physics, Imperial College London
Jul 2007 - Jun 2008: Senior research associate, Department of Astronomy, Boston University
Jan 2004 - Jul 2007: Research associate, Center for Space Physics, Boston University

Education and qualifications obtained:

Apr 2010 – Jul 2012: Postgraduate Certificate in Academic Practice (Merit).
Oct 2000 – Sept 2003: PhD, Department of Physics, Imperial College London.
Sept 1996 – Jul 2000: MSci in Physics with Space Science (1st class), University College London

Research outputs

197 published articles in international, refereed journals. 2 additional articles under review.

Approx. 5500 citations (Google Scholar, Jan 2022), resulting in an h-index of 43 and i10-index of 129

Full publication list here: <http://www.met.reading.ac.uk/~vy902033/papers.htm>

Evidence of research esteem

2013 Philip Leverhulme Prize for Astronomy and Astrophysics

2012 Fowler Prize (Royal Astronomical Society)

Invited talks and seminars - In the last 3 years, I have given 17 invited talks

Research activities at a national/international level

Co-Investigator for the Solar Orbiter magnetometer instrument.

2011-2014: Associate Editor for AGU's Journal of Geophysical Research (Space).

2016-present: Associate Editor for Solar Physics, specialising in heliospheric physics

Space mission and grant selection panels - NASA's Explorer class (2012) and IMAP rideshare (2019) class spacecraft. Chair of a 2013 NASA "Heliophysics" review panel. Panellist/reviewer for NSF, NASA, UK and European research councils.

Research funding (excluding studentships)

2021-24	£812k STFC consolidated grant, "Reading solar system science 2020" (ST/V000497/1)
2020-23	£140k STFC SWIMMR S4 funding (ST/V00235X/1, £450k total)
2019-20	£42k ESA funding, "Use of L5 Data in CME models" (UKRI/RS02344/TP; £450k total)
2019-21	£350k NERC standard grant, "Solar Wind Data Assimilation" (NE/S010033/1)
2018-21	£1M STFC consolidated grant, "Reading solar system science" (ST/R000921/1)
2018-19	International Space Science Institute funding for two 15-member international team meetings in Bern, Switzerland, "Recalibration of the Sunspot Number Series"
2017-21	£300k NERC highlight topic, "Climatology of geomagnetically-induced currents" as part of the SWIGS Directed Highlight Topic (NE/P016928/1; £2M total)

2015-18 £660k STFC consolidated grant, "Reading solar system science" (ST/M000885/1)
 2014-16 £70k Philip Leverhulme Prize
 2012-15 £270k NERC standard grant, "Driving solar wind models with real data." (NE/J024678/1)

Teaching experience and administrative duties (at University of Reading, unless indicated)

Temporary Research Division Leader for Earth Observation and Space (Sep-Dec 2018)

Program director for Environmental Physics BSc (2013-present)

2010-22 PH101 Physics of the Natural World (Lecturer, 20 credits)
 2010 PH1760 Making Light Work (Lecturer, Aberystwyth University, 10 credits)
 2010 PH3270 Atoms and Molecules (Lecturer, Aberystwyth University, 10 credits)
 2007,08 AS101 Introduction to Astronomy (Lecturer, Boston University, 10 credits)

Postdoctoral researcher supervision

2019 – Dr Bingkun Yu, STFC funded (ST/R000921/1)
 2019 – Dr Nachi Chakraborty, STFC funded (ST/R000921/1)
 2019 – Dr Matthew Lang, NERC funded (NE/S010033/1)
 2018-21 Dr Allan Macneil, STFC funded (ST/R000921/1)
 2017-18 Dr Maria Valdivieso, STFC funded (ST/M000885/1)
 2017-18 Mr Joel Keeble, STFC funded (ST/M000885/1)
 2015 Dr Adam El-Said, NERC funded (NE/J024678/1)
 2013-14 Dr Mai Mai Lam (Philip Leverhulme Prize funded)
 2012 – Dr Luke Barnard, STFC funded (ST/R000921/1. Previously NERC NE/P016928/1, STFC, ST/M000885/1, and NERC, NE/J024678/1)

Postgraduate research student supervision

PI for STFC doctoral training centre (2020 - present)

2020 – Harriet Turner (NERC Scenario funded with CASE award from UK Met Office), "Forecast improvements from solar wind data assimilation"
 2019 – Lauren James (STFC funded. Co-supervised with Chris Scott), "Evolution of coronal mass ejections through interplanetary space"
 2019 – Anne-Marie Neale (STFC funded), "Origins of the slow wind"
 2018-22 Carl Haines (NERC SCENARIO funded with CASE award from EDF), "Geomagnetic effects on the power grid"
 2018 – Austin Jones (NERC SCENARIO. Co-supervised with Chris Scott), "Solar Wind Modulation of Lightning"
 2017-21 Dr Téo Bloch (STFC), "Machine learning for solar wind and radiation-belt science"
 2017-21 Dr Shannon Jones (University of Reading funded. Co-supervised with Chris Scott), "Tracking coronal mass ejections with heliospheric imagers"
 2015 - 18 Dr Sarah Bentley (NERC. Co-supervised with Clare Watt), "Solar wind driving of ULF wave activity"
 2012-16 Dr Kim Tucker-Hood (NERC and Met Office). Co-supervised with Chris Davis and David Jackson), "Estimating solar wind speed from STEREO heliospheric imagers"
 2011-14 Dr Simon Thomas (NERC. Co-supervised with Mike Lockwood), "Long Term Solar Variability Inferred from Cosmic Ray Records"