

## Paul James Wright

---

CONTACT INFORMATION	Rm 614, Kelvin Building University of Glasgow Glasgow, G12 8QQ United Kingdom	Work: +44 (0)14133 08855 Web: <a href="http://www.pauljwright.co.uk">www.pauljwright.co.uk</a> Email: <a href="mailto:paul.wright@glasgow.ac.uk">paul.wright@glasgow.ac.uk</a> Publication List: <a href="#">SAO/NASA ADS</a>
RESEARCH INTERESTS	My interests range from stellar to solar physics; my main interests lie in the heating of the solar atmosphere, including active regions and loops. I have expertise in analysis of data from <i>SDO/AIA</i> , <i>Hinode/XRT</i> , <i>Hinode/EIS</i> and <i>NuSTAR</i> .	
EDUCATION	<b>University of Glasgow</b> , Glasgow, UK Ph.D. Solar Physics Thesis Topic: <i>The Energetics of Small Flares and Brightenings</i> Advisers: Dr Iain G. Hannah, Dr Alexander MacKinnon	2014 – present
	<b>University of Southampton</b> , Southampton, UK MPhys Astrophysics with a year abroad First class honours (1:1) Adviser: Professor Malcolm Coe	2010 – 2014
	<b>Harvard University/Harvard-Smithsonian CfA</b> , Cambridge, MA MPhys Astrophysics with a year abroad Thesis Topic: <i>Superflare Rates of Solar-Like Stars</i> Advisers: Dr Steven H. Saar, Dr Jeremy J. Drake	2013 – 2014
ACADEMIC APPOINTMENTS	<b>Post-Graduate Research Assistant</b> , <a href="#">University of Glasgow SUPA School of Physics and Astronomy</a> Project: <i>The Energetics of Small Flares and Brightenings</i> <ul style="list-style-type: none"><li>Analysed observations of the Sun with <i>NuSTAR</i>, a telescope not designed for helio-physics. These observations are the most sensitive of their kind and have resulted in numerous highly-collaborative peer-reviewed publications.</li><li>Analysed non-flaring coronal time-series in order to extract signatures of the coronal heating mechanism. Techniques included Fourier analysis, Wavelet analysis, and Local Intermittency Measure.</li><li>Studied the temperature distribution of the solar atmosphere through the recovery of an ill-posed inverse problem using techniques such as Tikhonov Regularization, Markov-Chain Monte Carlo, and Sparsity.</li></ul>	2014 – 2017
	<b>Visiting Researcher</b> , NASA Goddard Space Flight Center (GSFC) <a href="#">Heliophysics Science Division</a> <ul style="list-style-type: none"><li>Worked on the possibility of implementing DEM maps into in the <a href="#">Helioviewer</a> project, and their usefulness as an input for various established analysis techniques.</li></ul> Collaborators: <i>Nicholeen Viall, Jack Ireland</i>	2016
	<b>Research Scholar</b> , Harvard-Smithsonian Center for Astrophysics (CfA) <a href="#">Solar and Stellar X-Ray Group</a> <ul style="list-style-type: none"><li>Designed and implemented a sophisticated stellar flare detection routine for long-cadence (30 mins) <i>Kepler</i> data. This work has had coverage by <a href="#">Science</a>, and <a href="#">The Smithsonian Magazine</a>.</li></ul> Collaborators: <i>Steven Saar, Søren Meibom, Jeremy Drake, Vinay Kashyap</i>	2013 – 2014

## Paul James Wright

### REFEREED JOURNAL PUBLICATIONS

- [1] Marsh, A. J., Smith, D. M., Glesener, L. *et al* 2017. *First NuSTAR Limits on Quiet Sun Hard X-Ray Transient Events*, *ApJ* (in revision)
- [2] Wang, J., Simões, P. J. A., Jeffrey, N. L. S. *et al* 2017. *Observations of Reconnection Flows in a Flare on The Solar Disk*, *ApJL*, 847, L1
- [3] Wright, P. J., Hannah, I. G., Grefenstette, B. W., *et al* 2017. *Microflare Heating of a Solar Active Region Observed with NuSTAR, Hinode/XRT, and SDO/AIA*, *ApJ*, 844, 132
- [4] Kuhar, M., Krucker, S., Hannah, I. G., *et al* 2017. *Evidence of Significant Energy Input in the Late Phase of a Solar Flare from NuSTAR X-ray Observations*, *ApJ*, 835, 6

### FIRST AUTHOR PUBLICATIONS IN PREPERATION

- [5] **Wright, P. J.**, Hannah, I. G., Viall, N. M., *et al*
- [6] **Wright, P. J.**, Saar, S. H., Meibom, S., *et al*

### CONFERENCES, WORKSHOPS, & SCHOOLS

#### Invited Oral Presentations

- ISSI Team Meeting: Coronal Nanoflares*, Bern, CH 2016
- Harvard-Smithsonian Center for Astrophysics*, Cambridge, MA, USA 2014

#### Oral/ePoster Presentations

- Solar Physics Division Meeting (SPD/AAS)*, Portland, OR, USA 2017
- Coronal Loops Workshop VIII*, Palermo, Sicily, IT 2017
- Living with a Star (SDO/LWS) Workshop*, Burlington, VT, USA 2016
- Hinode 10*, Nagoya, JP 2016
- National Astronomy Meeting 2016*, Nottingham, UK 2016
- Hinode 9*, Belfast, UK 2015
- Glasgow-Cambridge Flare Workshop*, Glasgow, UK 2015

#### Poster Presentations

- European Solar Physics Meeting (ESPM)*, Budapest, HU 2017
- Solar Physics Division Meeting (SPD/AAS)*, Portland, OR, USA 2017
- Living with a Star (SDO/LWS) Workshop*, Burlington, VT, USA 2016
- Coronal Loops Workshop VII*, Cambridge, UK 2015
- NAM 2015*, Llandudno, UK 2015
- 223rd AAS Meeting*, National Harbor, MD, USA 2014

#### Schools Attended

- CESRA Radio Summer School 2015*, Glasgow, UK 2015
- STFC Advanced Summer School in Solar Physics*, Dundee, UK 2014

#### Conferences/Workshops Attended

- NuSTAR Solar Workshop (remote participation)*, Berkeley, CA, USA 2017
- SUPA Cormack Astronomy Meeting*, Edinburgh, UK 2015
- RAS Discussion Meeting: Results from IRIS*, London, UK 2015
- SUPA Cormack Astronomy Meeting*, Edinburgh, UK 2014
- 1st Space Glasgow Research Conference*, Glasgow, UK 2014

### AWARDS AND GRANTS TOTAL: £7000

#### SUPA School of Physics and Astronomy, University of Glasgow

- Solar Physics Division Meeting (SPD/AAS) Student Poster Award* 2017
- Solar Physics Division Meeting (SPD/AAS) Studentship Award* 2017
- Coronal Loops Workshop VIII Travel Award* 2017
- National Astronomical Observatory of Japan Travel Award* 2016
- Hinode 9 Travel Award* 2015
- European Space Agency/Cambridge Philosophical Society Travel Award* 2015

	<b>School of Physics and Astronomy, University of Southampton</b>	
	Research Scholarship	2013
	Summer Studentship Grant	2013
COMMUNITY INVOLVEMENT	<b>CESRA Radio Summer School</b> , Volunteer Organiser	2015
OUTREACH	<b>Glasgow Science Centre</b> , Demonstrator	2016
	<b>British Science Week</b> , Demonstrator	2016
	<b>Institute of Physics: <i>Women and Girls in Science</i></b> , Demonstrator	2016
	<b>Scottish Television (STV)</b> , Guest Presenter	2015
	<b>World Wide Telescope</b> , Ambassador	2013 – 2014
	<b>BBC Stargazing Live</b> , Demonstrator	2013
	<b>So'ton Astrodome</b> , Demonstrator	2012
	<b>BBC Bang Goes The Theory Roadshow</b> , Demonstrator	2012
TEACHING	<b>University of Glasgow</b>	
	<b>Astronomy 1 Tutorial Demonstrator</b>	2016 - 2017
	Supervised students, and marked first year astronomy problem sets.	
	<b>Physics Pre-University Summer School</b>	2015
	Engaged students in various physics experiments and marked assignments.	
	<b>Astronomy 3/4 (Honours) Laboratory Demonstrator</b>	2015 - 2016
	Demonstrated, supervised, and marked a number of final-year research projects covering topics such as asteroid light curves, and solar limb darkening.	
MEMBERSHIPS	<b>International Space Science Institute (ISSI)</b> , Young Scientist Member	2015 – present
	Member of Paola Testa's ISSI Team: <i>New Diagnostics of Particle Acceleration in Solar Coronal Nanoflares from Chromospheric Observations and Modeling</i>	
	<b>Royal Astronomical Society</b> , RAS Fellow	2015 – present
MORE INFORMATION	More information and auxiliary documents can be found at <a href="http://www.pauljwright.co.uk">http://www.pauljwright.co.uk</a> , on <a href="#">ResearchGate</a> , and <a href="#">GitHub</a> .	