Jonathan Peter Marshall

Curriculum Vitae

Contact

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Academic Employment

[2017 –] **Independent Postdoctoral Fellow**, Academia Sinica
[2014 – 2017] **Vice Chancellor's Postdoctoral Research Fellow**, UNSW Australia
[2010 – 2014] **Postdoctoral Researcher**, Universidad Autónoma de Madrid

Education

[2006 – 2011]	The Open University	Ph.D., '*Detection and Analysis of Debris Discs*'
[2004 – 2006]	University of London	MSc. Astrophysics Hons (Dist.)
[2000 – 2004]	University of St. Andrews	MSci. Astrophysics Hons (2:ii)

Professional Experience

[2018 –] Deputy Group Leader, Interstellar and Circumstellar Matter group, ASIAA
[2016] Member of Local Organising Committee, Australian Exoplanets Workshop
[2013 –] Reviewer for research proposals to funding agencies (NASA)
[2011 –] Reviewer for academic journals (MNRAS, ApJ, A&A, JKAS)

Honours and Awards

[2014] UNSW Vice Chancellor's Postdoctoral Research Fellowship (AU$118,000 p.a.)
[2006] Science, Technology and Facilities Council funded Ph.D. studentship (£13,000 p.a.)

Publication Metrics

Publications: 63 (first publication 2007; 10 publications as first author)
Metrics: *h*-index 25 (*1,375 refereed citations*)
ADS Library: https://ui.adsabs.harvard.edu/#/public-libraries/Vxyy0RmdTLO1Qgchb25iSQ

Supervision Experience

Ph.D. students:
[2017 – present] Cristian Chavez (USQ, part time)
[2016 – present] Shane Hengst (USQ, part time)
Masters students:
[2018 – 2019] Kai-Erh Yeh (ASIAA)
Undergraduate students:
[2018] Emma Bordier, Rebecca Chen, Bruno Marquez, Richard Pan

Invited and Contributed Talks

[2019] '*Inferring the Size Scales of Planetary Systems Using Resolved Debris Discs*' at Spica2019, Crete

[2019] '*Inferring the Size Scales of Planetary Systems Using Resolved Debris Discs*' at New Quests in Stellar Astrophysics IV, Puerto Vallarta

[2018] '*Comprehensive analysis of HD 105, a young Solar system analogue*' at Current and Future Trends in Debris Discs, Victoria

[2017] '*Correlations between stars, planets and circumstellar debris*' at Annual Science Meeting of the Astronomical Society of Australia, Canberra

[2016] '*Using unresolved thermal emission to infer the presence of planets around disc-host stars'*, at 6th Australian Exoplanet Workshop, Melbourne

[2016] '*Extended debris discs around nearby, Sun-like stars as a probe of disc-planet interactions*' at Annual Science Meeting of the Astronomical Society of Australia, Sydney

[2015] '*Far-infrared and sub-millimetre imaging of HD 76582's circumstellar dust*' at 5th Australian Exoplanet Workshop, Sydney

[2015] '*Scattered light observations of faint circumstellar dust*' at Annual Science Meeting of the Astronomical Society of Australia, Fremantle

[2014] '*Correlations between stars, planets and circumstellar debris*' at Annual Science Meeting of the Astronomical Society of Australia, Sydney

[2013] '*Herschel's contribution to constraining the dust properties of debris discs*', at 'Dust Growth 13', Heidelberg

[2013] '*DUst around NEarby Stars: The survey observational results*' at International Astronomical Union Symposium 299, Victoria

[2012] '*The debris disc-exoplanet connection as seen by DEBRIS and DUNES*' at International Astronomical Union Symposium 293, Beijing

[2012] '*Dust around Nearby Stars*' at 'Herschel's view of Star and Planet Formation', Leiden

[2011] '*A summary of the Herschel DUNES survey*' at 'Signposts of Exoplanets', NASA Goddard

[2011] '*Extreme debris discs in DUNES*' at EPSC/DPS joint meeting, Nantes

[2011] '*DUNES observations of debris discs around nearby stars with exoplanets*' at 'Giant Planets and Super-Earths', Flagstaff

Seminars and Colloquia

[2019] '*Multi-wavelength aperture polarimetry of circumstellar debris discs*' at University of Washington, Seattle

[2018] '*Comprehensive analysis of HD 105, a young Solar system analogue*', INAOE

[2018] '*Debris dust as a tracer of planetary system architectures*', ASIAA

[2017] '*Searching for exo-Kuiper belts around exoplanet host stars*', Steward Observatory

[2016] '*Using unresolved thermal emission to infer the presence of planets around disc-host stars'*, Swinburne University of Technology

[2015] '*Revealing the scale and structure of planetary systems through far-infrared and (sub-)millimetre observations of circumstellar dust*', USQ

[2015] '*Pluto, New Horizons, and the outer Solar system*', University of Wollongong

[2015] '*Revealing the scale and structure of planetary systems through far-infrared and sub-millimetre observations of circumstellar dust'*, University of Manchester

[2014] '*Weighing and measuring planetary systems*', University of Melbourne

[2014] '*Circumstellar debris discs as a sign of planetary systems*', Mt. Stromlo

[2014] '*Debris discs and exoplanets*', INAOE

Positions of Responsibility

[2018 –] **Deputy group leader** for the Interstellar and Circumstellar Matter group at ASIAA (one faculty, four postdocs, one PhD student). Responsible for chairing weekly group meetings, mentoring, and administrative tasks.

[2018 –] **Representative for postdoctoral researchers** at ASIAA (one of three). Responsible for identifying matters of concern amongst the postdoctoral researchers and raising them with the institute director and members of faculty through regular (quarterly) meetings.

Teaching Experience

[2018] **Lecturer** for ASIAA Summer Student Program (25 students), covered basic research tools (e.g. ADS, SIMBAD) and best practices (e.g. record taking, citations, data management).
Lecturer for TIARA Summer School, presented overview talk on observations, modelling, and theory of debris discs.

[2016] **Lecturer** for '*PHYS 1131 Introductory Physics*', covering mechanics, thermal physics, and waves and oscillations (102 students).

[2014, 2015] **Teaching assistant** for '*PHYS1160: Introduction to Astrophysics and Life Elsewhere in the Universe*', an online course (groups of 30 students).

[2014] **Lecturer** for '*Formation of Stars and Planets*', a masters' level course at UAM (6 students). Also co-wrote the course.
Lecturer for Guillermo Haro Summer School, presented overview talk on observations of debris discs and exoplanets.

[2009] **Teaching assistant** for '*SX288: Observing the Universe*', an undergraduate astrophysics course held at the Observatorio Astrofisica de Mallorca (groups of 8 students).

Outreach Activities

[2019 –] Co-organiser for monthly Astronomy on Tap Taipei events, arranging speakers and quiz. Point of contact for stargazing events at ASIAA.

[2014 – 2017] Invited talk at University of Wollongong for New Horizons Pluto flyby (300+ students).
Co-authored three articles on the New Horizons mission for website theconversation.com (> 50,000 reads).
Gave talks at AIP sponsored 'Physics in the Pub' evenings (attend.: ~ 100 ea.), UNSW Physics Outreach programme (attend.: 40-60 ea.), and several local astronomical societies (attend.: 30-50 ea.).
Interviewed for series 'Quick Physics' as part of UNSW Physics Outreach (6,000+ views on Youtube).
Member of ASA Education and Public Outreach Chapter.

[2009] Trained as STEMNet (Science, Technology, Engineering and Maths Network) ambassador

Professional Memberships

[2015 –] Member of the International Astronomical Union
[2014 – 2017] Member of the Astronomical Society of Australia
[2007 – 2015] Fellow of the Royal Astronomical Society
[2004 – 2015] Associate Member of the Institute of Physics

Computing Skills

General: Coding, statistical analysis, data analysis, data visualisation, archiving, text editing
Programming languages: Python (intermediate), IDL (advanced), Fortran 90 (basic)
Specific software: Hyperion, RADMC-3D, Mercury, CASA, HIPE, LaTeX, MS Office Suite

Languages

English (native); German, Spanish (intermediate); Chinese: Mandarin (basic)