

Felix D. Priestley

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RESEARCH INTERESTS

- Gas dynamics and chemistry in star-forming regions
- The formation and evolution of cosmic dust

EMPLOYMENT

Cardiff University, UK Post-doctoral research associate	Jul 2019 -
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University College London, UK Post-doctoral research associate	Oct 2018 - Jun 2019
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EDUCATION

University College London, UK <i>PhD Astrophysics</i> Thesis Title: Molecule and dust emission at the beginnings and ends of stellar evolution Supervisor: Prof. Mike Barlow Awarded Dec 2018	Oct 2015 - Sep 2018
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University College London, UK <i>MSci Astrophysics, 1st Class</i> Dissertation Title: The effects of gravitational collapse on the chemical evolution of prestellar cores Supervisor: Prof. Serena Viti	Sep 2011 - Jun 2015
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PUBLICATION SUMMARY

Refereed articles: 35 (20 first author)
Total citations: 336 (h-index 10)

TECHNICAL SKILLS

Programming: Fortran 77/90/Modern (experienced), Python, Linux shell, C/C++
Software: Non-ideal MHD (PHANTOM, AREPO), chemistry (UCLCHEM, UCLPDR), radiative transfer (MOCASSIN, LIME), dust emission (DINAMO)

TALKS
(* - INVITED)

University College London <i>Probing the importance of magnetic fields in star-forming regions using molecular line emission</i>	Mar 2022
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*St. Andrews University <i>What can molecular lines tell us about star formation?</i>	Jan 2022
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NAM 2021 <i>The properties of shocked dust in supernova remnants</i>	Jul 2021
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Magnetic fields and the structure of the filamentary ISM <i>The characteristic widths of magnetised filaments</i>	Jun 2021
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	ISM Scales 2021 <i>Filament widths in molecular clouds: are they universal, and if so, why?</i>	May 2021
	*Supernovae and Interstellar Dust <i>Observational constraints on dust destruction in shocks</i>	Apr 2021
	*Supernovae and dust tele-talk series <i>Constraining early-time dust formation in core-collapse supernovae</i>	Mar 2021
	The Rise of Metals and Dust in Galaxies through Cosmic Time <i>Cold dust emission from the shocked material around supernova remnants</i>	Oct 2020
	Supernovae and dust tele-talk series <i>Revisiting the dust destruction efficiency of supernovae</i>	Oct 2020
	Supernovae and dust tele-talk series <i>Dust survival in supernova remnants: an observational perspective</i>	Feb 2020
	EWASS 2019 <i>The survival of dust grains in the ejecta of core-collapse supernovae</i>	Jun 2019
	*Cardiff University <i>Molecular tracers of star formation mechanisms</i>	Apr 2019
	The Supernova-Supernova Remnant Connection <i>The pre- and post-shock dust mass in Cassiopeia A</i>	Jan 2019
AWARDS	Jon Darius Memorial Prize (University College London) <i>Outstanding postgraduate research in Astrophysics</i>	2019
SUPERVISION	Charles Yin, MSc Supervised research project (published in MNRAS; Yin et al. 2021)	2019 - 2020
TEACHING	Deputy module organiser, Cardiff University Administrative and teaching duties for undergraduate maths course	2023 -
	Demonstrator, Cardiff University Senior lab demonstrator for undergraduate observational astronomy course	2021 -
	Demonstrator, University of London Observatory Assisted with undergraduate practical astronomy courses	2013 - 2017

COMMUNITY	Referee for ApJ, MNRAS, A&A, Nature Astronomy	2020 -
	Seminar organiser, Cardiff Astronomy group	2019 - 2022
	SOC Cosmic Star Formation session, NAM 2021	2021
	BISTRO collaboration member	2020 -
OUTREACH	Barry Astronomical Society Public talk: Cores, clouds and filaments: where do stars form, and why?	Feb 2022
	Royal Society Summer Science Exhibition JWST exhibit demonstrator	Jul 2018
	Cafe Scientifique Public talk: Cosmic Dust from Exploding Stars	May 2017
REFeree CONTACT INFORMATION	Prof. Anthony Whitworth School of Physics and Astronomy, Cardiff University Queens Buildings, The Parade, Cardiff CF24 3AA, UK anthony.whitworth@astro.cf.ac.uk	
	Prof. Mike Barlow Department of Physics and Astronomy, University College London Gower Street, London, WC1E 6BT, UK mjb@star.ucl.ac.uk	
	Prof. Ilse De Looze Sterrenkundig Observatorium, Ghent University Krijgslaan 281 - S9, 9000 Gent, Belgium ilse.delooze@ugent.be	
	Dr. Paul Clark School of Physics and Astronomy, Cardiff University Queens Buildings, The Parade, Cardiff CF24 3AA, UK clarkpc@cardiff.ac.uk	
	Prof. Serena Viti Leiden Observatory, Leiden University P.O. Box 9513, 2300 RA Leiden, The Netherlands viti@strw.leidenuniv.nl	