Felix D. Priestley

School of Physics and Astronomy, Cardiff University
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Research Interests

- Hydrodynamical and astrochemical modelling of star formation
- Dust emission from supernovae and supernova remnants

Employment

Cardiff University, UK **Jul 2019 -**
Post-doctoral research associate

University College London, UK **Oct 2018 - Jun 2019**
Post-doctoral research associate

Education

University College London, UK **Oct 2015 - Sep 2018**
PhD Astrophysics
Thesis Title: Molecule and dust emission at the beginnings and ends of stellar evolution
Supervisor: Prof. Mike Barlow
Awarded Dec 2018

University College London, UK **Sep 2011 - Jun 2015**
MSci Astrophysics, 1st Class
Dissertation Title: The effects of gravitational collapse on the chemical evolution of prestellar cores
Supervisor: Prof. Serena Viti

Publication Summary

Refereed articles: 18 (12 first author)
Total citations: 137, h-index 6

Technical Skills

Programming: Fortran 77/90/Modern (experienced), Python, Linux shell
Languages: English (native speaker), Spanish (intermediate)

Talks & Posters

NAM 2021 **Jul 2021**
The properties of shocked dust in supernova remnants

Magnetic fields and the structure of the filamentary ISM **Jun 2021**
The characteristic widths of magnetised filaments

ISM Scales 2021 **May 2021**
Filament widths in molecular clouds: are they universal, and if so, why?

Supernovae and Interstellar Dust **Apr 2021**
Observational constraints on dust destruction in shocks

Supernovae and dust tele-talk series **Mar 2021**
Constraining early-time dust formation in core-collapse supernovae

The Rise of Metals and Dust in Galaxies through Cosmic Time **Oct 2020**
Cold dust emission from the shocked material around supernova remnants

Supernovae and dust tele-talk series **Oct 2020**
Revisiting the dust destruction efficiency of supernovae

Supernovae and dust tele-talk series **Feb 2020**
Dust survival in supernova remnants: an observational perspective

EWASS 2019 **Jun 2019**
The survival of dust grains in the ejecta of core-collapse supernovae

Supernova Remnants: An Odyssey in Space after Stellar Death II **Jun 2019**
The survivability of newly-formed dust grains in supernova remnants

Cardiff University **Apr 2019**
Molecular tracers of star formation mechanisms

The Supernova-Supernova Remnant Connection **Jan 2019**
The pre- and post-shock dust mass in Cassiopeia A

Cosmic dust: origin, applications & implications **Jun 2018**
The heating sources for the dust emission from Cassiopeia A

The Hydride Toolbox **Dec 2016**
An investigation of the origin of the argonium emission from the Crab Nebula

Supernova Remnants: An Odyssey in Space after Stellar Death **Jun 2016**
The origin of the argonium emission discovered in the Crab Nebula

Awards

Jon Darius Memorial Prize **2019**
Outstanding postgraduate research in Astrophysics

Teaching

MSc research project supervisor **2019-**
Charles Yin (2019-20) - published in MNRAS

Demonstrator, University of London Observatory **Sep 2013 - Jun 2017**
Assisted with undergraduate practical astronomy courses

Observing Experience	**Isaac Newton Telescope, La Palma** 5 nights observing for UVEX/IPHAS survey	**Aug 2017**
Community	**Referee for ApJ**	**2020 -**
	Seminar organiser, Cardiff Astronomy group	**2019 -**
	SOC Cosmic Star Formation parallel session, NAM	**Jul 2021**
Outreach	**Royal Society Summer Science Exhibition** JWST exhibit demonstrator	**Jul 2018**
	Cafe Scientifique Public talk: Cosmic Dust from Exploding Stars	**May 2017**

Referee Contact Information

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Prof. Ilse De Looze
Sterrenkundig Observatorium, Ghent University
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Prof. Serena Viti
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