Felix D. Priestley

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Research Interests

- Dynamics and chemistry of star-forming regions
- Formation and evolution of dust in the ISM

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: 26 (16 first author)
Total citations: 229, h-index 8

Technical Skills

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

Talks (* - invited)

University College London **Mar 2022**
Probing the importance of magnetic fields in star-forming regions using molecular line emission

***St. Andrews University** **Jan 2022**
What can molecular lines tell us about star formation?

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

***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

Awards

Jon Darius Memorial Prize (University College London) **2019**
Outstanding postgraduate research in Astrophysics

Supervision

Charles Yin, MSc **2019 - 2020**
Supervised research project (published in MNRAS; Yin et al. 2021)

Teaching

Demonstrator, Cardiff University **2021 -**
Senior lab demonstrator for undergraduate observational astronomy course

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

Community

Referee for ApJ, MNRAS, A&A **2020 -**

Seminar organiser, Cardiff Astronomy group **2019 - 2022**

SOC Cosmic Star Formation session, NAM 2021 **2021**

BISTRO collaboration member **2020 -**

OUTREACH

Barry Astronomical Society **Feb 2021**
Public talk: Cores, clouds and filaments: where do stars form, and why?

Royal Society Summer Science Exhibition **Jul 2018**
JWST exhibit demonstrator

Cafe Scientifique **May 2017**
Public talk: Cosmic Dust from Exploding Stars

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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