

Dr Andrew John Rigby

Contact

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Publications: [ADS](#), [ORCID](#)

Employment:

- 6th June 2016 – present: Postdoctoral Research Associate, School of Physics & Astronomy, Cardiff University

Education:

- 2012 – 2016: PhD at the Astrophysics Research Institute, Liverpool John Moores University. STFC-funded studentship. Thesis: *Molecular clouds and star formation in the Inner Galaxy*, supervised by Dr Toby Moore.
- 2008 – 2012: MPhys (Hons) Astrophysics; first class, University of Liverpool and Liverpool John Moores University (joint degree programme). Thesis: *The Physics of Triggered Star Formation*, supervised by Prof. Carole Mundell and Dr Toby Moore.

Prizes, awards and honours received:

- Recipient of the Isaac Roberts Prize for Best Astrophysics Student (University of Liverpool and Liverpool John Moores University).
- Recipient of PhD studentship from the Science and Technology Facilities Council

Research interests:

- Molecular clouds and star formation
- The impact of large-scale environment within galaxies
- Galactic plane surveys in continuum emission and spectral lines
- The earliest stages of high-mass star and cluster formation
- Single dish and interferometer facilities in the IR-mm wavelength range

Key achievements:

- Instrumental in development of the CHIMPS survey (Rigby et al. 2016, 2019)
- PI of service project to complete the CHIMPS observations
- Leading the Galactic plane survey within the GASTON project (Rigby et al. 2021) including first continuum measurements of clump mass growth
- Pioneering the infrared-bright fraction as a metric of ISM evolution
- Cover figure for the IRAM annual report 2020, and IRAM 2021 Summer School poster
- PI of 20-hour NOEMA + 43-hour IRAM 30-m observational program
- PI of 37-hour ALMA proposal Cycle-8 (observations pending)

Teaching experience:

- January 2020 – present: Deputy module organiser for *Observing the Universe* (year 2)
- March 2018 – Nov 2019: Guest lecturer in the *Introduction to Astronomy*, *Computational Physics*, and *Formation and Evolution of Stars* modules
- Spring 2017 – Tutorial cover for M. Smith
- Autumn 2013 – Spring 2015: Demonstrator for 2nd year astronomy labs
- Spring 2013 – Spring 2015: Distance Learning tutor at the Astrophysics Research Institute
- Spring 2012: Demonstrator in 1st year undergraduate problem classes

Student supervision - PhD and undergraduate (include dates):

- June – September 2021, MSc project student Georgie McGarry
- October 2018 – present, co-supervision of PhD student, Michael Anderson
- August – September 2014, supervision of A-level Nuffield Research Placement student

Scientific responsibilities held:

- Leader of the Galactic plane survey within the GASTON Collaboration
- Chair of the Source Extraction and Analysis Working Groups, member of all Working Groups (July 2017 to present) in the CHIMPS & CHIMPS2 collaboration.

- Member of the NIKA2 Collaboration, including the Core Team and Calibration Team
- PI of a Science Use Case in the AtLAST collaboration
- Organiser of the Astronomy & Gravitational Wave seminar series at Cardiff University (June 2017 to June 2019)

Main Collaborators:

N. Peretto, T. Moore, D. Eden, M. Anderson, S. Ragan, J. Urquhart, A. Duarte-Cabral, M. Thompson, E. Watkins, P. André, G. Fuller, A. Traficante.

Collaborations:

CHIMPS/CHIMPS2, CAFFEINE, CLOGS, GASTON, MAJORS, NIKA2, SEDIGISM.

Conferences & Seminars:

- July 2021, invited conference talk at '2nd mm Universe @ NIKA2: Observing the millimetre universe with the NIKA2 camera', Sapienza University, Rome, Italy (remote)
- June 2019, contributed talk at 'Linking the Milky Way and nearby galaxies', Helsinki, Finland
- May 2019, invited seminar at the University of Hertfordshire, Hatfield, UK
- April 2018, conference talk at EWASS in Liverpool, UK
- August 2017, conf. talk at 'SFDE17: from Local Clouds to Distant Galaxies', Quy Nhon, Vietnam
- August 2016, seminar at the East Asian Observatory, Hilo, Hawaii
- September 2016, conference talk at 'VIALACTEA 2016: The Milky Way as a Star Formation Engine' in Rome, Italy
- March 2015, conference. talk, 'The Soul of High-Mass Star Formation', Puerto Varas, Chile

Refereeing:

- 2018–2020: James Clerk Maxwell Telescope
- 2018–2021: Astronomy & Astrophysics, including Letters.
- 2016–2017: Publications of the Astronomical Society of Japan

Publication summary:

50 publications, including 5 as the lead author.

Most-cited papers:

1. Adam, R, ... Rigby, A. et al. 2018, A&A 609, A115, 94 citations
2. Ward-Thompson, D.; ... Rigby, A. J. et al. 2017, ApJ 842, 66, 62 citations
3. Rigby, A. J. et al. 2016, MNRAS, 456, 2885, 61 citations
4. Moore, T. J. T.; ... Rigby, A. J. et al. 2015, MNRAS 453, 4264, 42 citations
5. Soam, A.; ... Rigby, A. J. et al. 2018, ApJ 861, 65, 41 citations

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My publication list is available on [ADS](#), or on ORCID (<https://orcid.org/0000-0002-3351-2200>).

References:

Dr Nicolas Peretto: PerettoN@cardiff.ac.uk

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Dr Toby J. T. Moore: T.J.Moore@lmu.ac.uk

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