Eamon O'Gorman - CV

CONTACT INFORMATION

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EDUCATION

Trinity College Dublin, Dublin, Ireland
Doctor of Philosophy **October 2009 – November 2013**

- Advisor: Professor Graham Harper
- Thesis title: *Radio Interferometric Studies of Cool Evolved Stars*
- Thesis successfully defended on 15th November 2013
  - External Examiner: Professor Tom Millar (Queen's University Belfast, United Kingdom)
  - Internal Examiner: Professor Peter Gallagher (Trinity College Dublin, Ireland)

International Space University (ISU), Strasbourg, France
M.Sc., Space Studies **September 2008 – August 2009**

University College Dublin (UCD), Dublin, Ireland
B.Sc., Theoretical Physics, (First class honours) **September 2003 – June 2007**

HONOURS AND AWARDS

- Enterprise Ireland/European Space Agency scholarship to study at the ISU, 2008
- UCD Entrance Scholar, 2003

REFEREED PUBLICATIONS

O'Gorman, E., Harper, G. M., Brown, A., Richards, A. M. S. *Multi-epoch, Multi-wavelength VLA Plus Pie Town Observations of Betelgeuse*, (*In Prep*).

O'Gorman, E., Harper, G. M., Brown, A., Drake, S., Richards, A. M. S. *Multi-wavelength Radio Continuum Emission Studies of Dust-free Red Giants*, 2013, AJ, 146, 98.

Richards, A. M. S., Davis, R. J., Decin, L., Etoka, S., Harper, G. M., Lim, J. J., Garrington, S. T., Gray, M. D., McDonald, I., **O'Gorman, E.**, Wittkowski, M. *e-MERLIN resolves Betelgeuse at λ 5 cm: hotspots at 5 $R_\star$*, 2013, MNRAS, 432, L61.

O'Gorman, E., Harper, G. M., Brown, J. M., Brown, A., Redfield, S., Richter, M. J., Requena-Torres, M. A. *CARMA CO($J = 2 - 1$) Observations of the Circumstellar Envelope of Betelgeuse*, 2012, AJ, 144, 36.

Sada, P. V., Deming, D., Jennings, D. E., Jackson, B. K., Hamilton, C. M., Fraine, J., Peterson, S. W., Haase, F., Bays, K., Lunsford, A., **O'Gorman, E.** *Extrasolar Planet Transits Observed at Kitt Peak National Observatory*, 2012, PASP, 124, 212.

Sada, P. V., Deming, D., Jackson, B., Jennings, D. E., Peterson, S. W., Haase, F., Bays, K., **O'Gorman, E.**, Lundsford, A. *Recent Transits of the Super-Earth Exoplanet GJ 1214b*, 2010, ApJ, 720, L215.

CONFERENCE PRESENTATIONS

Oral:

O'Gorman, E. *Radio Interferometric Studies of Cool Evolved Stellar Mass Outflows.* DIAS Seminar, Dublin, Dublin Institute for Advanced Studies, Ireland, February 2013.

O'Gorman, E., et al. *Probing the Thermodynamics of Red Giant Mass Outflows with the JVLA.* Astronomical Science Group of Ireland, Galway, Ireland, November 2012.

O'Gorman, E., et al. *Probing the Thermodynamics of Red Giant Mass Outflows with the JVLA.* Radio Stars and Their Lives in the Galaxy, MIT Haystack Observatory, MA, USA, October 2012.

O'Gorman, E. *CO in the Circumstellar Envelope of Betelgeuse with CARMA.* The 41st Young European Radio Astronomers Conference, University of Manchester/Jodrell Bank Observatory, UK, July 2011.

Poster:

O'Gorman, E., Harper, G. M. *What is Heating Arcturus' Wind?*
16th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, University of Washington, Seattle, USA, August 2010.

Accepted Proposals as PI

O'Gorman, E., et al. *Beta Gem b: An alternative candidate in the search for extrasolar planetary radio emission (II)*, GMRT, 2013, ID: 25_039

O'Gorman, E., et al. *Beta Gem b: An alternative candidate in the search for extrasolar planetary radio emission*, GMRT, 2013, ID: 24_013

O'Gorman, E., et al. *Thermal Continuum Mapping of Red Giant Chromospheres*, CARMA, 2012, ID: c1038

O'Gorman, E., et al. *L and S band Continuum Observations of Arcturus: Completing a Clean Sweep*, VLA, 2012, ID: VLA-12A-472

Short-term Research Stays

National Centre for Radio Astrophysics, India, 2013: Collaboration with Dr. Sandeep Sirothia to prepare our GMRT 150 MHz observations and carry out initial data analysis.

Harvard-Smithsonian Center for Astrophysics, USA, 2011: Collaboration with Dr. Joanna Brown to carry out initial analysis on our CARMA millimeter data using CASA.

NASA Goddard Space Flight Center, USA, 2009: Three month student internship with Dr. Drake Deming in the area of transiting exoplanet characterization. Analyzed data from the FLAMINGOS infrared camera on the 2.1 m Kitt Peak National Observatory Telescope.

Teaching Experience

- September 2010 - April 2012: Bi-weekly physics tutorials for undergraduate engineering students.
- September 2009 - April 2010: Teaching assistant for undergraduate physics students.

Outreach

- Throughout the year we carry out a "Build a Comet in the Lab" workshop for both secondary school students interested in pursuing physics in college, and for primary school students from disadvantaged backgrounds.
- Regularly visit secondary schools to discuss career opportunities in physics and astrophysics to prospective students.
- Active member in "SunSpotter", a new project which aims to enlist the help of the public to readily identify and characterize sunspots in NASA satellite image.

Programming

IDL, Python, CASA, LaTeX 2_ε, PHP, BASH, and UNIX–like operating systems.

Languages

- English (Native)
- Good Irish and French

Professional Organisations

- Fellow of the Royal Astronomical Society

- Associate Member of the Institute of Physics

REFEREES

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