Eamon O'Gorman

CONTACT Information School of Physics Trinity College Dublin

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EDUCATION

Trinity College Dublin, Dublin, Ireland

Doctor of Philosophy

• Advisor: Professor Graham Harper

 \bullet Thesis submitted on 30th September 2013

• Thesis defence on 15th November 2013

International Space University (ISU), Strasbourg, France

M.Sc., Space Studies

September 2008 – August 2009

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October 2009 – present

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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., 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, Eamon., Lundsford, A. Recent Transits of the Super-Earth Exoplanet GJ 1214b, 2010, ApJ, 720, L215.

Conference Presentations

Oral:

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?

 $16{\rm th}$ 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 2009 April 2010: Discussion lab instructor for undergraduate physics students
- September 2010 April 2012: Bi-weekly physics tutorials for undergraduate engineering 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.

Programming

IDL, Python, CASA, \LaTeX 2 ε , PHP, BASH, and UNIX-like operating systems.

Professional Organisations

- Fellow of the Royal Astronomical Society
- Associate Member of the Institute of Physics

OTHER Interests I love the outdoors and playing sport. I have played hurling (a traditional Irish sport) since I was a child, and in 2011 I was named Trinity College senior hurling player of the year.

Referees

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Prof. Graham Harper

Prof. Peter Gallagher School of Physics Trinity College Dublin Dublin 2, Ireland phone: +353 (0)1 896 1300 e-mail: peter.gallagher@tcd.ie Prof. Hugh Hill International Space University 1 rue Jean–Dominique Cassini Strasbourg, France phone: +33 (0)3 88 65 54 39 e-mail: hill@isu.isunet.edu