

# Thomas J. Haworth - Academic CV

## PERSONAL DETAILS

### Address:

School of Physics  
University of Exeter  
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**Date of Birth:** 4<sup>th</sup> July 1988

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## REFEREED PUBLICATIONS

Haworth, Thomas J.; Harries, Tim J.; Acreman, David M., **Testing diagnostics of triggered star formation**, 2012, MNRAS, 426, 203

Haworth, Thomas J.; Harries, Tim J., **Radiation hydrodynamics of triggered star formation: the effect of the diffuse radiation field**, 2012, MNRAS, 420, 562

Haworth, Thomas J.; Harries, Tim J.; Acreman, David M.; Rundle, David A., **Assessing molecular line diagnostics of triggered star formation using synthetic observations.**, 2012, Submitted to MNRAS (ArXiv:TBC)

## OTHER PUBLICATIONS

Harries, Tim J., Haworth, Thomas J.; Acreman, David M., **Radiation hydrodynamics simulations of massive star formation using Monte Carlo radiation transfer**, 2012, The Labyrinth of Star Formation.

Haworth, Thomas J.; Harries, Tim J., Acreman, David M., **Testing models of triggered star formation: theory and observation**, 2012, The Labyrinth of Star Formation.

## EDUCATION

Studying for PhD

University of Exeter Astrophysics group since 10/2010

MPhys Physics with Astrophysics (1st Class with Honours)

University of Exeter 2006-2010

## PROFESSIONAL ASSOCIATIONS

Fellow of the Royal Astronomical Society (RAS) since 2010

Member of the Institute of Physics (IOP) since 2009

## ACADEMIC AND OTHER AWARDS

University of Exeter, School of Physics school prize 2010

University of Exeter, Dean's commendation 2010

Shell Step Award. Best IT placement (Essex) 2009

Shell Step Award. Runner up overall placement (Essex) 2009

## WORK EXPERIENCE

Performing a case study into electronic record keeping in scientific research. 2012

Working with the Exeter Data Archive team to facilitate archiving on the university supercomputer, ZEN 2012

Royal Bank of Scotland. Data Analyst Summer 2008, 2010

Prospects College. Database and intranet development  
as part of the Shell Step program. 2009

### TEACHING EXPERIENCE

1<sup>st</sup> year astrophysics laboratory tutor 2012–2013

1<sup>st</sup> year physics laboratory tutor 2010–2013

Completed the Student Associates Scheme (SAS) 2008

### CONFERENCES AND EVENTS

Mind The Gap.  
Institute of Astronomy, Cambridge. **Talk.** 08/07/2013–12/07/2013

RAS National Astronomy Meeting.  
University of St Andrews. **Talk.** 01/07/2013–05/07/2013

Nordita photo-evaporation in astrophysical systems meeting.  
Nordita, Stockholm. **Talk.** 01/06/2013–28/06/2013

Starbench code comparison workshop.  
Exeter University. **LOC.** 08/04/2013–11/04/2013

Galaxy evolution seminar.  
Oxford University. **Talk.** 17/01/2013

DiRAC science day.  
University of Glasgow. **Talk.** 06/09/2012

The labyrinth of star formation.  
Kolymbari, Crete. **Poster.** 18/05/2012–22/05/2012

RAS National Astronomy Meeting.  
University of Manchester. **Talk.** 27/03/2012–30/03/2012

DiRAC science day.  
University College London. **Poster** 15/09/2011

**Outreach:** AimHigher ‘Meet the scientist’ (2011), Physics in the field (2010), Westgate science club (2010)

### OTHER SKILLS

**Programming:** fortran, python, html, bash scripting, SQL, C.

**Parallelization:** MPI, openMP, hybrid methods

**Operating systems:** Max OSX, Ubuntu Linux, Windows

### RESEARCH INTERESTS

**Star formation:** Massive stars, radiative feedback, star forming regions, radiatively driven implosion, triggered star formation

**Radiation hydrodynamics:** AMR, Monte Carlo photoionization, hydrodynamics

**Synthetic observations:** SED’s, forbidden line, molecular line, radio and dust continuum imaging