



# Dr Elizabeth Jane TASKER

D.o.B: 12<sup>th</sup> July 1980  
Nationality: British  
Address: Department of Astronomy,  
211 Bryant Space Science Building,  
PO Box 112055,  
Gainesville, FL 32611, USA  
Email: tasker@astro.ufl.edu

## EMPLOYMENT

[ 2006- ] University of Florida, Gainesville, FL, USA  
**Postdoctoral Research Fellow in Theoretical Astrophysics**

## EMPLOYMENT HISTORY, EDUCATION & QUALIFICATIONS

[2005-2006] Columbia University, New York City, USA  
**Postdoctoral Research Assistant**

[ 2002-2005 ] University of Oxford, Merton College, UK  
**D.Phil : Numerical Simulations of the Formations and Evolution of Galaxies** (*Awarded Jan '06*)

- Includes eight months spent at Columbia University, New York, USA and
- Three months at Swinburne University of Technology, Melbourne, Australia

[ 1998-2002 ] University of Durham, Collingwood College, UK  
**M.Sci Theoretical Physics: First Class**

## PUBLICATIONS

- Paper, MNRAS:** *A Test Suite for Quantitative Comparison of Hydrodynamics Codes in Astrophysics*,  
**E. Tasker**, R. Brunino, N. Mitchell, D. Michielsen, S. Hopton, F. Pearce, G. Bryan,  
T. Theuns, MNRAS, in press
- Paper, ApJ:** *The Effect of the Interstellar Model on Star Formation Properties in Galactic Disk*,  
**E. Tasker** & G. Bryan, ApJ 2008
- Paper, ApJ:** *Simulating Star Formation and Feedback in Galactic Disk Models*,  
**E. Tasker** & G. Bryan, ApJ 2006
- Paper, ApJL:** *The Environmental Impact of Lyman-break Galaxies*,  
**E. Tasker** & G. Bryan, ApJL 2006
- Paper, MNRAS:** *Fundamental Differences between SPH and Grid Methods*,  
O. Agertz, B. Moore, J. Stadel, D. Potter, F. Miniati, J. Read, L. Mayer, A. Gawryszczak,  
A. Kravtsov, A. Norland, F. Pearce, V. Quilis, D. Rudd, V. Springel, J. Stone, **E. Tasker**,  
R. Teyssier, J. Wadsley, R. Walder, MNRAS, 2007
- Paper, in prep.** *Star formation I: Formation and Evolution of Giant Molecular Clouds in an Isolated Galaxy  
Disk Model*, **E. Tasker** & J. Tan
- Paper, in prep.** *Fragmentation of gaseous protoplanetary disks with different numerical methods*,  
L. Mayer, A. Gawryszczak, A. Boley, **E. Tasker**
- Paper, in prep.** *Formation of Stellar Clusters in Galaxy Disk Simulations*,  
S. Gill, G. Bryan & **E. Tasker**

- Proceedings:** *Simulating the ISM in Global Disk Galaxies*,  
**E. Tasker**, G. Bryan & J. Tan, The Evolving ISM in the Milky Way & Nearby Galaxies, 4th Spitzer Science Center Conference, 2007 (astro-ph/0802.3944)
- Proceedings:** *The Effect of the ISM Model on Star Formation Properties in Galactic Discs*,  
**E. Tasker** & G. Bryan, Formation and Evolution of Galaxy Disks, Rome, 2007 (astro-ph/0711.0230)
- Proceedings:** *Building a Virtual Milky Way*,  
**E. Tasker** & G. Bryan, First Light with the GTC, RMxAC, 2007

## TEACHING

- [2008 - ] Jointly supervising graduate student, Mike Butler
- [2007- ] Organizer of a weekly astrophysics theory seminar series at the University of Florida
- [2007, 2008] 4 graduate lectures in numerical techniques, plus assignment designed, University of Florida
- [2003] Assistant in 2nd year undergraduate computing lab, University of Oxford. C programming taught.
- [2003 - 2004] Private tutor to second year undergraduate physics, Open University, UK

## AWARDS RECEIVED

- 2<sup>nd</sup> Prize in the **Royal Astronomical Society Writing Competition**, 2004
- Winner of the BASF/Daily Telegraph **Young Science Writers Awards**, 1999
- Prize for Physics** while attending the Wygesston & Queen Elizabeth I Sixth Form College, 1998
- Highly Commended in the NIREX/Daily Telegraph **Young Science Writers Awards**, 1997

## TALKS

### Colloquia

- KIPAC, Stanford University, Dec 2008
- University of Florida, Oct. 2008
- Michigan University, Sept. 2008
- Michigan State University, Sept. 2008
- University of Washington, May 2008
- McMaster University, March 2008
- University of Toronto, March 2008
- University of Waterloo, March 2008
- Los Alamos Research Lab, July 2007
- University of Oxford, Dec. 2006

### Contributed Conference Talks

- The Impact of Simulations in Cosmology and Galaxy Formation, Trieste, Oct. 2008
- The Cosmic Web, Socorro, May 2008

- The Evolving ISM in the Milky Way & Nearby Galaxies, Dec 2007
- Formation and Evolution of Galaxy Disks, Rome, Oct. 2007
- Next Generation of Computational Models of Baryonic Physics in Galaxy Formation, Zurich, Sept. 2007
- From Stars to Planets, Gainesville, April 2007
- First Light with the GTC, Miami, June 2006
- AAS, Calgary, June 2006
- ASA, Sydney, July 2005

### Poster Presentations

- Star Formation, Then & Now, Santa Barbara, Aug. 2007
- AAS, San Diego, Jan. 2005
- Environments of Galaxies Conference, Crete, Aug. 2004

### Observing

- 10 nights at Parkes Radio Telescope, Australia, 2005
- 3 nights observing at the INT in La Palma, 2004

## REFERENCES

### Prof. Greg Bryan

Department of Astronomy,  
 Columbia University,  
 1325 Pupin Physics Labs,  
 550 West 120th Street,  
 New York, NY 10027 (USA)  
 gbryan@astro.columbia.edu

### Prof. Jonathan Tan

Department of Astronomy,  
 211 Bryant Space Science Center,  
 University of Florida,  
 PO Box 112055,  
 Gainesville, FL 32611 (USA)  
 jt@astro.ufl.edu

### Dr Frazer Pearce

Dept. Physics and Astronomy,  
 University of Nottingham,  
 Nottingham,  
 NG7 2RD (UK)

frazer.pearce@nottingham.ac.uk