

# CURRICULUM VITAE

## Richard Gwyn Bower

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### Present Position

October 2003 – present	Professor at the University of Durham
April 2003 – April 2006	PPARC Senior Research Fellow at the University of Durham
April 2002 – April 2003	Leverhulme Fellow at the University of Durham
October 2000 – October 2003	Reader at the University of Durham
October 1995 – October 2000	Lecturer at the University of Durham

### Previous Positions

October 1993 – October 1995	Senior Research Fellow at the Royal Observatory, Edinburgh
October 1991 – October 1993	Royal Society/SERC NATO Fellow at the Max Planck Institut für Extraterrestrische Physik, Munich, Germany
December 1989 – October 1991	Senior Research Assistant at the University of Durham

### Education

October 1986 – December 1989	PhD, Durham University: “The Stellar Populations of Early-Type Galaxies in Groups and Clusters” (Supervisor: Prof. R. S. Ellis)
October 1983 – June 1986	St Anne’s College, Oxford University: BA in Physics (1st Class Honours)

### Membership of Committees

DiRAC Resource Allocation Committee (2012-2014, chair 2015-). Swiss CSCS SAC (2015).	Allocates resources on the UK’s DiRAC high performance computer network Advises Swiss Super-Computing Centre on time assignment and research priorities
DiRAC Industrial Liason Panel (2014-)	Connects astrophysical simulation research to UK industry
Einstein Fellowship Panel (2012)	Allocates high profile fellowships in the USA
STFC Astronomy Advisory Panel (2004-2007, 2012-)	Advises on UK policy for astronomy and astrophysics
PPARC Dark Energy Strategy Review (2005)	I led a review of the UK’s involvement in projects aimed at measure the dark energy equation of state.

In addition, I have served on various telescope time allocation committees for STFC and ESA.

## Publication Statistics

I have published 184 refereed papers, not including conference proceedings. My papers have accrued a total of 13400 citations, 32 papers have over 100 citations, 73 papers have over 50 citations. My most cited paper has received over 1291 citations.

## Awards and Prizes

My research has been recognised by the award of prizes and fellowships such as:

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- PI of the Durham Intel Parrallel Computing Centre. Awarded by INTEL to fund development of the fine-grained task-parallel cosmology simulation code SWIFT. Durham Univ. Christopherson-Knott Fellowship (2014). Awarded to University staff to promote new work in interdisciplinary science. Awarded for cross-disciplinary work in Cosmological models from 300 BC to the present day.
- Mitchell Prize in Bayesian Statistics (2011). The prize was awarded to Vernon, Goldstein and myself by the International Society for Bayesian Analysis and the American Statistical Association, for our work applying the method of Bayesian emulators to the study of galaxy formation. We showed how the Bayesian emulator method could quickly explore the 16-dimensional parameter space of the GALFORM galaxy formation model, identifying the key physical process of the model.
- PPARC Senior Research Fellowship (2003). Awarded by the UK research funding agency to senior academic staff to promote excellence in research.
- Leverhulme Foundation Research Fellowship (2002). Awarded by the Leverhulme foundation to promote excellence in research.
- Daiwa prize for Anglo-Japanese Collaboration (2001). Awarded by the Daiwa foundation to recognise outstanding UK-Japanese collaboration.

## Talks and Colloquia

During the last 10 years, I have given 53 invited workshop talks and presentations at international meetings. Highlights *from the past year* include:

Colloquium Speaker, “Black Hole feedback in the EAGLE simulation project”, UCL, May 2015  
Public Talk, “Contemporary Answers to Ancient Questions: Aristotle, Robert Grosseteste and the EAGLE project”, Lincoln Cathedral Seminar, Lincoln, April 2015  
Invited Speaker, “Durham’s IPCC and the SWIFT cosmology code”, Intel PPC meeting, Dublin 2015  
Invited Speaker, “Galaxy Environments in the Eagle Simulations”, Birmingham, February 2015  
Colloquium Speaker, “Black Hole feedback in the EAGLE simulation project”, MSSL, January 2015  
Invited Speaker, “Galaxy Environments in the Eagle Simulations”, Edinburgh, January 2015  
Special Colloquium Speaker, “The Medieval Multiverse of Robert Grosseteste”, Munich MPA, December 2014  
Colloquium Speaker, “Latest Results from the EAGLE simulation project”, Munich MPA, December 2014  
Public Talk, “Everything from Nothing: the story of the Universe”, IOP seminar, Sheffield, November 2014  
Public Talk, “Everything from Nothing: the story of the Universe”, Public Talk Series, Daresbury, November 2014  
Public Talk, “Recreating the Medieval Universe of Robert Grosseteste”, Mahfouz Seminar, Oxford, October 2014  
Invited Speaker, “AGN vs. Galaxies”, Durham, July 2014  
Invited Speaker, “3rd meeting of the International Robert Grosseteste Society”, Lincoln, July 2014  
Opening Speaker, “National Astronomy Meeting: Galaxy Simulations”, Portsmouth, June 2014