

# Dr Joanna Goodger

PhD (Herts), MSci (Hons, QMUL), FRAS, MInstP

14 Jasmine Gardens, Hatfield  
Hertfordshire, AL10 0BQ  
Landline: 01707 692310  
Mobile: 07764 934645  
joanna.goodger@gmail.com  
www.johanger.co.uk

## Qualifications

---

- 2010 **PhD Astrophysics** University of Hertfordshire  
“Interactions Between Radio-loud Active Galaxies and their Environments”. Supervisors: M.J. Hardcastle, J.H. Croston
- 2005 **MSci Astrophysics First Class (Hons)** Queen Mary, University of London  
Courses included Solid State Physics, Particle Physics, Nuclear Physics, Electric and Magnetic Fields, C and C++ Programming, Maths, Physical Dynamics, Thermal and Kinetic Physics, as well as Astrophysics specific courses.
- 2000 3 A-Levels: Mathematics with Mechanics, Physics and Chemistry. GCSE Astronomy.
- 1998 11 GCSEs A-C including Mathematics, Sciences and English.

## Awards

---

- The **E.J. Wignall Prize** for the top UG student in the first year (82% average over 8 courses).
- The **Westfield Trust Prize** for the most able student who has just completed the final year and has been awarded First Class Honours.

## Employment History

---

- 2006 – present University of Hertfordshire
- Post Doctorate Researcher:** Analysis and publication of scientific research with teaching duties.
- Data Analyst:** Analysis of UG attendance at lectures to identify patterns in the students’ absences.
- Web Designer:** Design, development and administration of the Bayfordbury Observatory website including interactive scheduling and an online booking and payment system.
- Experiment Developer:** Design of 4 physics experiments to encourage AS-level students to continue to University level physics, including initial development, testing of the equipment, design of comprehensive accompanying multimedia on the theory and the experiment, and distribution.
- Bayfordbury Team Coordinator:** Schedule organisation, activities development and general supervision of the Bayfordbury Observatory UG practicals, open evenings and private visits.
- 2003 – 2005 Queen Mary, University of London
- Student Demonstrator:** Assistance in UG exercise classes, marking of UG coursework, tutoring at the study centre supporting UG students in all years of their degrees, demonstrating in physics master classes for gifted and talented GSCE students, and giving tours of the campus and department.
- 2002 – 2003 Isaac Newton Group of Telescopes, Santa Cruz de la Palma, Tenerife
- Student Support Astronomer and Research Assistant:** Paid internship at the ING as a research assistant managing my own projects and a student Support Astronomer (SA) on the JKT and INT telescopes responsible for training visiting astronomers and the telescope set up, and principal investigator for statistical analysis of telescope time.
- 1998 – 2006 ASDA Stores Limited
- Shop Floor Assistant:** In admin and the cash office, I was responsible for checking the reports and balancing the tills. On the shop floor, I was responsible for advertising, stock replenishment and stock management, price changes, waste monitoring, and as night supervisor, I was in charge of a team who maximised product impact, and were responsible for presenting the department at its best. I was involved in charity work and training of colleagues during the main system upgrade.

## Languages & Skills

---

**Computational languages:** C, C++, IDL, Perl, HTML, PHP, MySQL

**Operating Systems:** Windows (98, 2000, XP, Vista) and Linux

**Software Experience:** MS Office (98 and 2007), data processing software AIPS, CIAO, and XMM-SAS

**Spoken languages:** English, French (GCSE), Spanish (Basic)

**Communication Skills:** Delivered 7 presentations to experts at national and international conferences. Enthusiastic public speaker with experience addressing different levels of audience.

**Technical Writing Skills:** Published 7 peer-reviewed journal papers (2 first author, 3 more in prep.), 4 conference proceedings, my PhD thesis, and 4 successful telescopes proposals.

**Analytical Skills:** Written programs to statistically test the quality of my data and the relationships between the measurements including Monte-Carlo simulations.

**Management Skills:** Time managed my PhD and the work contributed by my international collaborators. Organised a team of PG students who supervised visits to Bayfordbury Observatory.

**Project Management:** Managed my PhD project to assure the deadlines were met and data were organised. Also managed budget, time and the development of equipment for the Luggage Lab project. Organised the activities and people involved in the Bayfordbury visits and the Dark Sky Discovery Site Launch event.

## Public Communication of Science

---

- Organised and supervised observatory visits for school groups, community groups, and the general public at open evenings, arranging computer-based activities, telescope and planetarium tours
- Development of a new radio interferometer at Bayfordbury Observatory
- Development of solar physics open days for the summer months at Bayfordbury Observatory
- Revision classes in Physics at a local sixth form college
- Participation in "Researchers in Residence" program telling school children what it is like to be an Astronomer and a professional scientist
- Luggage Lab physics experiments aimed at encouraging A-level students into further education.
- Organised and participated in the Dark Sky Discovery Site launch event in London
- Development of activities for blind people to experience Astronomy

## Interests

---

During my UG degree I was involved in the physics and astronomy society at QMUL, PsiStar, as President (2003 – 2005) and Social Secretary (2000-2002). I'm an Amateur Astronomer with my own telescopes. I enjoy cooking and baking, gardening, needlework, being outdoors, camping, and I love horror films and literature. I am also on the committee for Totton & Eling Carnival.

## References

---

Dr M.J. Hardcastle, STRI, University of Hertfordshire, Hatfield, Hertfordshire, AL10 9AB, UK  
+441707.286409 M.J.Hardcastle@herts.ac.uk

Dr J.H. Croston, University of Southampton, University Road, Southampton, SO17 1BJ, UK  
+4423.80597343 J.Croston@soton.ac.uk

Dr R.P. Kraft, Harvard-Smithsonian Centre For Astrophysics, 60 Garden Street, Cambridge, MA 02138 USA  
+01617-496-7709 rkraft@cfa.harvard.edu