
DAVID ROSS BALLANTYNE

Curriculum Vitae

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School of Physics,
Georgia Institute of Technology,
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EDUCATION

- | | | |
|-------|---|------------------------------------|
| Ph.D. | Astronomy, Institute of Astronomy, University of Cambridge , United Kingdom Supervisor: Prof. A.C. Fabian Thesis: "Ionized Accretion Disks Around Black Holes" | 10/2002 |
| M.Sc. | Astronomy & Physics, University of Toronto , Canada Supervisor: Dr. D. Johnstone | 09/1999 |
| B.Sc. | Honours Physics & Astronomy (Co-op), University of Victoria , Canada | 05/1998 with distinction |

WORK EXPERIENCE

- Assistant Professor 08/2008–present
*Center for Relativistic Astrophysics,
School of Physics, Georgia Institute of Technology, Atlanta, U.S.A.*
- Prize Postdoctoral Fellow in Theoretical Astrophysics 09/2005–08/2008
Theoretical Astrophysics Program, The University of Arizona, Tucson, U.S.A.
- Postdoctoral Fellow 09/2002–08/2005
Canadian Institute for Theoretical Astrophysics, Toronto, Canada
- Co-op Student 05/1997–08/1997
Canadian Institute for Theoretical Astrophysics, Toronto, Canada
Supervisors: Dr. J. Magorrian & Prof. S. Tremaine
- Co-op Student 09/1996–12/1996
Canadian Institute for Theoretical Astrophysics, Toronto, Canada
Supervisor: Prof. P. G. Martin
- Co-op Student 01/1996–04/1996
United Kingdom Infrared Telescope, Hilo, Hawaii, U.S.A.
Supervisors: Dr. J. K. Davies & Dr. T. Hawarden
- Co-op Student 01/1995–04/1995
Dominion Radio Astrophysical Observatory, Penticton, Canada
Supervisor: Dr. R. S. Roger

HONOURS & AWARDS

| <i>Name</i> | <i>Location of Tenure</i> | <i>Period Held/Received</i> |
|---|---|-----------------------------|
| Nominated for David and Lucile Packard Fellowship | Georgia Institute of Technology | 2009 |
| Theoretical Astrophysics Program Prize Fellowship | University of Arizona | 2005-2008 |
| NSERC PDF Award | CITA | 2002-2004 |
| NSERC PGS B Award | University of Cambridge | 2000-2002 |
| Commonwealth Fellowship | University of Cambridge | 1999-2002 |
| Isaac Newton Studentship | University of Cambridge | 1999-2002 (declined) |
| CITA Theoretical Astrophysics Fellowship | University of Toronto | 1999 |
| NSERC PGS A Award | University of Toronto & University of Cambridge | 1998-2000 |
| RASC Victoria Centre Book Prize | University of Victoria | 1998 |
| Co-op Work Term Report Award | University of Victoria | 1997 |
| Robert S. Evans Scholarship in Astronomy | University of Victoria | 1997 |
| Don Ingham Scholarship in Astronomy | University of Victoria | 1996 |
| Hazel T. Knox Memorial Scholarship | University of Victoria | 1996 |
| President's Scholarship | University of Victoria | 1995 |
| Canada Scholars Award | University of Victoria | 1993-1997 |

INVITED SEMINARS

- Department of Physics and Astronomy
Georgia State University, U.S.A. 11/2008
- School of Physics
Georgia Institute of Technology, U.S.A. 01/2008
- Kavli Institute for Particle Astrophysics and Cosmology
Stanford, California, U.S.A. 11/2007
- Astrophysics Group, Department of Physics
Imperial College, United Kingdom 09/2007

- Carnegie Observatories 11/2006
Pasadena, California, U.S.A.
- Department of Physics & Astronomy 10/2006
University of Calgary, Canada
- Department of Astronomy & Physics 03/2006
St. Mary's University, Canada
- NASA/Goddard Space Flight Center 12/2005
Greenbelt, Maryland, U.S.A.
- Steward Observatory 09/2005
The University of Arizona, U.S.A.
- Department of Physics 07/2005
McGill University, Canada
- Steward Observatory 07/2005
The University of Arizona, U.S.A.
- Yale Center for Astronomy & Astrophysics 04/2005
Yale University, U.S.A.
- Department of Physics & Astronomy 03/2005
Clemson University, U.S.A.
- Department of Physics 03/2005
University of Alabama at Huntsville, U.S.A.
- Department of Physics & Astronomy 02/2005
Washington State University, U.S.A.
- Department of Astronomy & Physics 10/2004
St. Mary's University, Canada
- Department of Physics & Center for Space Research 09/2004
MIT, U.S.A.
- Kavli Institute for Theoretical Physics 06/2003
University of California, Santa Barbara, U.S.A.
- Herzberg Institute for Astrophysics 04/2003
Victoria, British Columbia, Canada
- Department of Physics and Astronomy 05/2002
University of Calgary, Canada
- Department of Physics and Astronomy 10/2001
University of Western Ontario, Canada
- Department of Physics and Astronomy 10/2001
University of Leicester, United Kingdom

SCIENTIFIC COMMITTEES

- Member of *NuSTAR* Education & Public Outreach Committee 2009–present
- Member of *IXO* Science Panel on “Black Hole Surveys” 2008–present
- Member of *NuSTAR* Science Team 2007–present
- Member of CSA Discipline Working Group in High Energy Astrophysics 2006–present
- Member of LSST Science Collaboration on AGN 2006–present

CONFERENCES ATTENDED

- Meeting of the Canadian Astronomical Society 05/2009
Toronto, Canada
- Multi-Messenger Relativistic Astrophysics 2009 05/2009
Atlanta, USA
- The EVLA Vision: Galaxies through Cosmic Time 12/2008
Socorro, USA
- Putting Gravity to Work: From Black Holes to Galaxy Clusters (invited talk) 07/2008
Cambridge, UK
- High Energy Astrophysics Division of the American Astronomical Society 04/2008
Los Angeles, USA
- Meeting of the American Astronomical Society 01/2008
Austin, USA
- Galaxy and Black Hole Evolution: Towards a Unified View 11/2007
Tucson, USA
- Meeting of Canadian Astronomical Society 06/2007
Kingston, Canada
- High Energy Astrophysics Division of the American Astronomical Society 10/2006
San Francisco, USA
- Physics and Astrophysics of Supermassive Black Holes 07/2006
Santa Fe, USA
- Meeting of the American Astronomical Society 06/2006
Calgary, Canada
- Meeting of Canadian Astronomical Society 06/2006
Calgary, Canada
- Six Years of Science with Chandra Symposium 11/2005
Boston, USA
- Physics of Astrophysical Outflows and Accretion Disks 05/2005
Santa Barbara, USA
- Meeting of Canadian Astronomical Society 05/2005
Montreal, Canada
- High Energy Astrophysics Division of the American Astronomical Society 09/2004
New Orleans, USA
- Meeting of Canadian Astronomical Society 06/2004
Winnipeg, Canada
- The Restless High-Energy Universe 05/2003
Amsterdam, The Netherlands
- High Energy Astrophysics Division of the American Astronomical Society 03/2003
Mt. Tremblant, Canada
- Meeting of the American Astronomical Society 01/2003
Seattle, USA
- Active Galactic Nuclei: from Central Engine to Host Galaxy 07/2002
Paris, France
- Making Light of Gravity 07/2002
Cambridge, UK

- National Astronomy Meeting 03/2002
Bristol, UK
- Frontiers of X-ray Astronomy (Royal Society Discussion Meeting) 02/2002
London, UK
- X-ray Spectroscopy of Active Galactic Nuclei with Chandra and XMM-Newton 12/2001
Garching, Germany
- Two Years of Science with Chandra 09/2001
Washington, D.C., USA
- X-Ray Emission from Accretion onto Black Holes 06/2001
Baltimore, USA
- National Astronomy Meeting 04/2001
Cambridge, UK
- Mass Outflow in Active Galactic Nuclei: New Perspectives 03/2001
Washington, D.C., USA
- First Science Results from the XMM/Newton and Chandra X-ray Observatories 02/2001
London, UK
- Spectroscopy Challenge of Photoionized Plasmas 11/2000
Lexington, USA
- High Energy Astrophysics Division of the American Astronomical Society 11/2000
Honolulu, USA
- 30th SAAS FEE Advanced Course: High-Energy Spectroscopic Astrophysics 04/2000
Les Diablerets, Switzerland
- Observational and Theoretical Progress in the Study of 12/1999
Narrow-line Seyfert 1 Galaxies; Bad Honnef, Germany
- New Perspectives on the Interstellar Medium 08/1998
Naramata, Canada

TEACHING

- Supervised Ph.D. thesis of A. Draper 2009–present
School of Physics, Georgia Institute of Technology
- Supervised A. Draper in PHYS 8901 Special Problems 2009
School of Physics, Georgia Institute of Technology
- Lecturer for PHYS 3123 Electrodynamics 2009
School of Physics, Georgia Institute of Technology
Awarded a “*Thank a Teacher*” Certificate
- Guest lecturer for AST 596G (“Active Galactic Nuclei”) 2007
Department of Astronomy, The University of Arizona
- Supervised undergraduate or graduate research students 2004, 2006-2007
- Teaching assistant for AST 101 at University of Toronto 1998–1999

ADMINISTRATION

- Seminar Chair 2008-2009
Center for Relativistic Astrophysics, Georgia Institute of Technology
- Member of Comprehensive Exam Committee 2008-2009
School of Physics, Georgia Institute of Technology

- Co-organizer of conference “Galaxy and Black Hole Evolution: Towards a Unified View”, The University of Arizona 2007
- CITA visitor/seminar committee 2003–2005
- CITA computer committee 2003–2004

JOURNAL REFEREE

- The Astrophysical Journal 2003–2007, 2009
- The Astrophysical Journal Letters 2004–2005, 2007–2008
- Astronomy & Astrophysics 2004, 2006
- Monthly Notices of the Royal Astronomical Society 2003–2004, 2006

REVIEW PANELS

- *RXTE* Cycle 13 Peer Review 2008
- *Suzaku* Cycle 1 Peer Review 2006
- Gemini Canadian Time Allocation Committee 2005
- *Chandra* Cycle 5 Peer Review 2003
- *RXTE* Cycle 9 Peer Review 2003

AWARDED OBSERVING TIME

- *Suzaku*, AO2 2007
- *XMM-Newton*, AO5 2006
- *XMM-Newton*, AO3 2004
- *XMM-Newton*, AO2 2003
- *RXTE*, Cycle 8 2003
- VLA 2000

SOCIETIES

- Member of American Astronomical Society (also of High Energy Division) 2001–present
- Member of Canadian Astronomical Society 2001–present

MEDIA COVERAGE

- Interview on WPCH morning show regarding the Large Hadron Collider 9/10/2008
- **“Milky Way Black Hole May Be a Colossal ‘Particle Accelerator’ ”**
The University of Arizona Media Release 02/2007
Coverage included: MSNBC.com, Yahoo.com, New Scientist, Science, Slashdot.org
Interviews given (invited): Space.com, CBC News Online, BBC Radio 4 (Frontiers, broadcast 16 May 2007)

- **“Scientists watch "movie" of neutron star explosion”**
 NASA Media Release 02/2004
 University of Toronto Media Release 02/2004
- **Coverage included:** CNN.com, USA Today, MSNBC.com,
 Discovery Channel, Yahoo.com, Slashdot.org
- **Interviews given (invited):** Space.com, Space TV, Varsity
 Newspaper, CIUT 89.5FM

OTHER SEMINARS

- Department of Physics and Astronomy 05/2007
 University of Victoria, Canada
- Department of Physics and Astronomy 04/2005
 University of Victoria, Canada
- Institute for Advanced Study 09/2004
 Princeton, New Jersey, U.S.A.
- Harvard-Smithsonian Center for Astrophysics 09/2004
 Cambridge, Massachusetts, U.S.A.
- Canadian Institute for Theoretical Astrophysics 02/2004
 Toronto, Canada
- Department of Physics and Astronomy 05/2002
 University of British Columbia, Canada
- Department of Physics and Astronomy 05/2002
 University of Victoria, Canada
- NASA/Goddard Space Flight Center 03/2001
 Greenbelt, Maryland, U.S.A.
- Department of Astronomy 03/2001
 University of Maryland, U.S.A.
- Canadian Institute for Theoretical Astrophysics 11/2000
 Toronto, Canada