

# Curriculum Vitae — Patrick Brian Hall

Associate Professor, York University

February 14, 2012

**Office address:** Petrie 337, 416-736-2100 x77752, FAX 416-736-5516, phall@yorku.ca

**Mailing address:** Department of Physics & Astronomy, York University, 4700 Keele St., Toronto, ON M3J 1P3, Canada

## Degrees

- Ph.D. Astronomy, University of Arizona, Dept. of Astronomy, January 1998  
Thesis: *An Optical/Infrared Study of Radio-Loud Quasar Environments*  
Advisor: Dr. Richard F. Green
- B.A. Astronomy, University of California at Berkeley, Dept. of Astronomy, May 1990
- B.A. Physics, University of California at Berkeley, Dept. of Physics, May 1990

## Employment History

|               |   |
|---------------|---|
| 07/09-present | Associate Professor and Member of the Faculty of Graduate Studies, Department of Physics and Astronomy, York University                                       |
| 07/04-06/09   | Assistant Professor and Member of the Faculty of Graduate Studies, Department of Physics and Astronomy, York University                                       |
| 10/03-06/04   | Research Associate, Department of Astrophysical Sciences, Princeton University  |
| 10/00-9/03    | Research Associate, Princeton University Observatory, Princeton University; and Investigador Asociado, Depto. de Astronomía, P. Universidad Católica de Chile |
| 1/98-9/00     | Post-Doctoral Fellow, Department of Astronomy, University of Toronto  |
| 6/94-12/97    | Graduate Research Assistant, Department of Astronomy, University of Arizona   |
| 9/93-5/94     | Graduate Teaching Assistant, Department of Astronomy, University of Arizona   |
| 9/90-8/93     | Graduate Research Assistant, Department of Astronomy, University of Arizona   |
| 6/89-8/89     | Summer Undergraduate Research Assistant, Department of Physics and Astronomy, University of Wyoming   |

## Academic Honours and Awards

- York University Faculty of Science and Engineering Established Researcher Award, 2011
- York University Merit Award Recipient (\$2,000 in 2007, 2008 and 2009)
- National Science Foundation Graduate Fellowship (1991-1993, 1995-1996)
- University of Arizona Graduate Fellowship (1990-1991)
- High Distinction in General Scholarship (summa cum laude) at U.C. Berkeley (1990)
- Regents' and Chancellors' Scholar, University of California, Berkeley (1986-1990)

## Scholarly and Professional Activities

- **Member, York University / Perimeter Institute Faculty Search Committee, December 2011 - present**
- Accepted talk on “Broad Absorption Line Quasars with Redshifted Troughs” at the *AGN Winds in Charleston* meeting, October 2011
- **Chair, Next Generation Canada-France-Hawaii Telescope Science Working Group on Quasars and Active Galactic Nuclei, June 2011 - present**
- **Lead Scientist for Gemini Observatory approved observing program *Weak Line Quasars at High Redshift: Anemic Broad-line Regions or Extremely High Accretion Rates?*, semester 2011B**
- Visiting Associate Professor, Cambridge University, January - June 2011
- Collaborator with Dr. Nahum Arav & colleagues on U.S. NSF proposal “BAL Outflows, A Prominent Agent of AGN Feedback: Confluence of Observations and Simulations”
- **Lead Scientist for Gemini Observatory approved observing program *Using a Gravitationally Lensed Arc as an Extended Light Source*, semesters 2011A & 2012A**
- Visiting Associate Professor, The Ohio State University, September - December 2010
- Attended the 38th Scientific Assembly of the Committee on Space Research in Bremen, Germany, July 20-24, 2010
- **External Collaborator in the Sloan Digital Sky Survey III Collaboration for research on Broad Absorption Line Quasars, March 2010 - March 2012**
- Presented poster paper at the International Astronomical Union Symposium *Co-evolution of Central Black Holes and Galaxies*, Rio de Janeiro, Brazil, August 2009

- York University Department of Physics & Astronomy Graduate Program & Admissions Committee, Summer 2009 - Summer 2010
- York University Faculty of Science & Engineering Committee on Tenure and Promotions alternate member, Summer 2009 - Summer 2010 (alternate at January 2010 meeting)
- Participant, *Observing with ALMA* Workshop at McMaster University, June 1-3, 2009
- York University Faculty of Science & Engineering Curriculum committee member, Summer 2008-Summer 2010
- York University Department of Physics & Astronomy Curriculum committee Chair, Summer 2008-Summer 2009
- Invited Participant, Aspen Center for Physics Summer Workshop *Active Galactic Nuclei: The Interplay Between Super-Massive Black Holes, Star Formation and Galaxy Evolution*, July 2008
- Canadian National Telescope Time Allocation Committee member, May 2008 - June 2010
- Co-Investigator, Hubble Space Telescope approved observing program *When degenerate stars collide: Understanding A New Explosion Phenomena*, May 2008
- Principal Applicant, NSERC Special Research Opportunity proposal *A Canadian Participation Group for the Sloan Digital Sky Survey III*, April 2007 - May 2008 (unsuccessful)
- Principal Investigator, Gemini Observatory approved observing program *Identification Spectroscopy of  $5.5 < z < 6.5$  Quasar Candidates*, semesters 2008A & 2008B
- Canadian Space Agency High-Energy Astronomy Discipline Working Group Extragalactic Subcommittee Chair, January 2008 - April 2009
- York University FSE Library committee chair, Fall 2007-Summer 2009
- York University Faculty Senate Library Information Technology Committee, Nov. 2007-2008
- Co-Applicant, NSERC Special Research Opportunity accepted proposal *Astronomical Research with the International Liquid Mirror Telescope*, **September 2007 - present**
- Spearheaded astronomy group computer activities (cleaning of computer room, purchase of color printer, investigation of possible improvements to computing support), Aug. 2007 - Aug. 2008

- York University Faculty Advisor to the York U. Astronomy Club, 2007-2008 Academic Year
- Research mentor for winner of the 2007 Ontario Association of Physics Teachers high school physics competition (see research mentoring section), August 2007
- Faculty participant in the York/Seneca Summer Science & Technology Program involving local high school students in research (see research mentoring section), Summer 2007, 2008, 2009
- Invited Speaker, graduate student workshop *Cooking with the Sloan Digital Sky Survey*, Canadian Astronomical Society Annual Meeting, May 2007, archived at [http://ara.phys.yorku.ca/sdss\\_casca07\\_files/frame.htm](http://ara.phys.yorku.ca/sdss_casca07_files/frame.htm)
- Conceived and organized the *Astronomy in Your Language* series of astronomy talks at York in four different languages, given by York faculty and graduate students, May 2007, featured in Y-File Apr. 23, 2007 — <http://www.yorku.ca/yfile/archive/index.asp?Article=8294> — and archived at <http://www.yorku.ca/phall/OUTREACH/>
- York University Division of Natural Science Faculty Advisor to the student-run NATS-AID tutoring program, April 2007-September 2008
- York University Department of Physics & Astronomy Theoretical Physics faculty job search committee member, Fall-Winter 2006-2007
- York University Faculty of Science & Engineering Research & Awards committee member, Fall 2006-Summer 2008
- Canadian Lead Scientist for Gemini Observatory approved observing program *Rapid Spectroscopy and Imaging Follow-up of Gamma-Ray Burst Afterglows*, semesters 2007A-2009A
- Co-Investigator, Hubble Space Telescope approved observing program *A Unique High Resolution Window to Two Strongly Lensed Lyman Break Galaxies*, 2007-2008
- Co-Investigator, Chandra X-ray Observatory approved observing program *Deconstructing the Accretion Disk Wind in Quasars*, 2007-2008
- York University Department of Physics & Astronomy Recruitment & Retention committee member, Fall-Winter 2006-2007 [initiated successful textbook donation at Fall 2006 high school teacher's night; participated in March Gala 2007; drafted careers webpage for dept. website]
- Co-Investigator, XMM-Newton Space Telescope approved observing program *X-ray properties of extreme UV-Fe II emitters*, 2006-2007

- James Clerk Maxwell Telescope Canadian Time Allocation Group member, July 2006 - May 2008
- Participant, *Learner-Centered Astronomy: A Teaching Excellence Workshop*, Calgary, June 2006
- Stood for membership (unsuccessfully) in the York University Faculty of Graduate Studies Appeals & Academic Honesty Committee, June 2006
- Invited Speaker, *AGN Winds in the Caribbean* conference, November 2005
- York University Division of Natural Science Advisory Council, October 2005-October 2008
- York University Department of Physics & Astronomy weekly astronomy group journal club organizer, Fall 2005-Summer 2008
- York University FSE Library committee member, Fall 2005-Fall 2007
- Colloquium Organizer, York University Dept. of Physics & Astronomy, Sept. 2004-May 2006
- Scientific Organizing Committee Member and Invited Speaker, *2004 Ringberg Castle Workshop on AGN Physics*, November 2004
- Invited talk on the Sloan Digital Sky Survey and my research using it at annual York University Physics & Astronomy Graduate Student Research Day, August 2004
- Participated in *Cosmos in the Classroom* professional meeting on astronomy teaching and education, July 2004

**Graduate Supervisions (2 Doctoral in progress, 1 completed; 0 Master's in progress, 3 completed)**

- Jesse Rogerson, York University Astronomy PhD program (**January 2011-present**)
- Laura Chajet, York University Astronomy PhD program (**December 2007-present**)
- Jesse Rogerson, York University Astronomy Thesis Master's program, *Investigating MgII Absorption in Quasar Pair Sight Lines* (September 2007-December 2010)
- Laura Chajet, York University Astronomy Thesis Master's program, *Infrared Confirmation of  $z > 5.5$  Quasar Candidates* (May 2005-November 2007)
- Banafsheh Hashemi Pour, York University Astronomy Project Master's, *Radio Properties of Broad Absorption Line Quasars* (May 2005-May 2007)

- Alireza Rafiee, York University Astronomy PhD program, *Weighing Supermassive Black Holes* (September 2004–April 2010)

### **Graduate Supervisory and Examining Committee Memberships**

- York University Faculty of Graduate Studies PhD examining committee member for Ms. Robin Metcalfe (program: Physics and Astronomy; supervisor: Dr. Marshall McCall), December 2011
- York University Faculty of Graduate Studies PhD examining committee member for Ms. Sunne Done (program: Physics and Astronomy; supervisor: Dr. Michael DeRobertis), November 2011
- York University Department of Physics and Astronomy internal MSc supervisory committee member for Ms. Lianne Manzer (program: Physics and Astronomy, supervisor: Dr. Michael De Robertis), September 2011
- York University Faculty of Graduate Studies Master's examining committee Chair for Mr. Stuart Dack (program: Physics and Astronomy; supervisor: Dr. Marshall McCall), August 2011
- York University Faculty of Graduate Studies PhD examining committee member for Mr. Brad Schultz (program: Physics and Astronomy; supervisor: Dr. William van Wijngaarden), May 2010
- York University Faculty of Graduate Studies Master's examining committee member for Mr. Piotr Wenderski (program: Earth and Space Science; supervisor: Dr. Jinjun Shan), October 2009
- York University Faculty of Graduate Studies PhD examining committee Chair for Mr. Chris Ryan (program: Physics and Astronomy; supervisor: Dr. Michael De Robertis), January 2009
- York University Faculty of Graduate Studies Master's examining committee member for Ms. Hua Lin (program: Earth and Space Science; supervisor: Dr. Jinjun Shan), November 2008
- York University Faculty of Graduate Studies PhD examining committee member for Mr. Jerome Whyte (program: Physics and Astronomy; supervisor: Dr. Scott Menary), September 2008
- York University Faculty of Graduate Studies Master's examining committee member for Mr. Peter Luca (program: Physics and Astronomy; supervisor: Dr. Norbert Bartel), September 2007

- York University Faculty of Graduate Studies PhD examining committee Chair for Ms. Svitlana Prada (program: Physics; supervisor: Dr. Diethard Bohme), July 2007
- York University Faculty of Graduate Studies PhD examining committee member for Mr. Ovidiu Vaduvescu (program: Physics and Astronomy; supervisor: Dr. Marshall McCall), Nov. 2005
- York University Faculty of Graduate Studies Master's examining committee member for Mr. Louis-Philippe Caron (program: Physics and Astronomy; supervisor: Dr. Wayne Cannon), Oct. 2004

### **Graduate, Undergraduate and High School Student Research Mentoring**

- **January 2011-present:** supervising York graduate student Jesse Rogerson on a PhD project to study BAL quasar colour variability.
- September-October 2010: supervised York undergraduate student Ted Rudyk on a project to search for long-term colour variability of 'overlapping-trough' broad absorption line quasars; this work will be incorporated in a future publication.
- July 2009: supervised high school student and York Summer Science and Technology Program participant Osato Idemudia in constructing a website for York's Scale Model of the Solar System: <http://solarsystem.blog.yorku.ca/>
- May-August 2009: supervised York/U. of Toronto undergraduate student (and NSERC USRA recipient) Konstantin Anosov on a study of dramatic spectral variability in an 'overlapping- trough' broad absorption line quasar; Mr. Anosov is 2nd author on the resulting paper.
- July-August 2008: with Master's student Jesse Rogerson, supervised high school students Haripraneith Kugan (1 week) and Harvinderpal Ghotra (3 weeks) to identify *R*-band dropout objects (candidate high-redshift quasars and brown dwarfs) in the Red-Sequence Cluster Survey.
- **December 2007-present:** supervising York graduate student Laura Chajet on a PhD project to predict quasar broad emission line profiles for a variety of disk wind outflow scenarios.
- September 2007-December 2010: supervised York master's student Jesse Rogerson on a project using X-ray flux limits on two unusual BAL quasars to constrain their outflows' physical properties, and on a project to constrain the spatial distribution of gas producing intervening Mg II absorption in quasar spectra using closely spaced quasar sightlines.
- August-October 2007: worked with York undergraduate Aaron Maxwell to rule out possible identifications for unusual molecular absorption bands in the spectra of certain white dwarf stars. Mr. Maxwell is 2nd author on a paper about these objects (Hall & Maxwell 2008).

- August 2007: worked with Ottawa high school student Bill Long to classify all spectra classified UNKNOWN by the Sloan Digital Sky Survey, and to examine high-redshift quasar candidates.
- July 2007: worked with Toronto high school student Akshay Awal to classify all spectra classified UNKNOWN by the Sloan Digital Sky Survey. Mr. Awal discovered a very unusual white dwarf, and is a coauthor on the paper about this object (Hall et al. 2008).
- May 2007-Aug. 2007: worked with York undergraduate (and NSERC USRA recipient) Rachel Ward to refine and extend the disk wind model of Murray & Chiang, use it to predict quasar broad emission line profiles, and to search for regions of parameter space for which the predicted profiles match the observations. A paper is in prep, and Ms. Ward won second place for her talk on this work at the 2007 Canadian Undergraduate Physics Conference.
- May 2006-Sept. 2006: worked with York undergraduate (and NSERC USRA recipient) Sarah Sadavoy to analyze high-resolution spectra of quasar outflows, resulting in a paper (Hall, Sadavoy et al. 2007) and a talk by Ms. Sadavoy at the 2006 Canadian Undergraduate Physics Conference.
- May 2005-Nov. 2007: supervised York graduate student Laura Chajet on a Master's project to select candidate very high redshift quasars from near-infrared imaging data. Ms. Chajet presented her work at a meeting of the Canadian Astronomical Society.
- May 2005-May 2007: supervised York graduate student Banafsheh Hashemi-Pour on a Master's project to study the radio emission of broad absorption line quasars.
- May 2005-Aug. 2005: worked with York undergraduate Rachel Ward on reduction of near-infrared imaging of candidate very high redshift quasars.
- May 2005-Aug. 2005: worked with York undergraduate Sandy Hsu on analysis of photo- and spectro-polarimetry of broad absorption line quasars.
- September 2004-April 2010: supervised York graduate student Alireza Rafiee on a PhD project to study the black hole masses of quasars. Mr. Rafiee has presented results of his work at three meetings of the Canadian Astronomical Society and two meetings of the American Astronomical Society. At the 211th meeting of the AAS in Austin, Texas in January 2008, Mr. Rafiee received a Chambliss Astronomy Achievement Student Award Honorable Mention for his poster "Quasar Lifetimes and Black Hole Spins." These awards "recognize exemplary research by undergraduate and graduate students." Mr. Rafiee also travelled to Kitt Peak National Observatory in November 2007 to help conduct observations for a related wide-field infrared survey for quasars.

### **Graduate Teaching**

- Winter 2012: York University Physics 4070/5090 'Stars and Nebulae'

- Winter 2010: York University Physics 4070/5090 ‘Stars and Nebulae’
- Fall 2008 - Winter 2009: York University Physics 4270/5390 ‘Astronomical Techniques’
- Winter 2008: York University Physics 4070/5090 ‘Stars and Nebulae’
- Fall 2006 - Winter 2007: York University Physics 4270/5390 ‘Astronomical Techniques’ graduate/advanced undergraduate laboratory course (year-long course required for astronomy graduate students and astronomy stream physics majors), including development of extrasolar planet transit observing project featured in Y-File Apr. 30, 2007: <http://www.yorku.ca/yfile/archive/index.asp?Article=8366>
- Winter 2006: York University Physics 4070/5090 ‘Stars and Nebulae’ graduate/advanced undergraduate course on Stellar Physics, Radiative Transfer and Interstellar Matter (one-term course required for astronomy graduate students and honours astronomy stream physics majors)

### **Undergraduate Teaching**

- Fall 2011 - Winter 2012: Natural Sciences 1740 ‘Astronomy’
- Fall 2009 - Winter 2010: Natural Sciences 1740 ‘Astronomy’
- Winter 2009: Physics 4310 ‘Physics or Astronomy Project’ (one-term research project course for undergraduate students Marie-Claude Boivin and Meg Russell on MATLAB generation and analysis of line emission profiles from simulated disk wind models in a certain range of parameter space)
- Fall 2008 - Winter 2009: Natural Sciences 1740 ‘Astronomy’
- Winter 2008: Natural Sciences 1740 ‘Astronomy’ (two-term introductory course for students outside the Faculty of Science), including development of seven new lab exercises (out of eight in the class) over 4 years, two semesters’ worth of WebCT quizzes over 2 years, and two semesters’ worth of in-class ‘clicker’ questions over 2 years.
- Fall 2007: Physics 1070 ‘Fundamentals of Astronomy’ (one-term introductory course open to any student; required for astronomy stream physics majors)
- Fall 2006 - Winter 2007: Natural Sciences 1740 ‘Astronomy’
- Fall 2005 - Winter 2006: Natural Sciences 1740 ‘Astronomy’
- Fall 2005: Physics 4310 ‘Physics or Astronomy Project’ (one-term research project course for undergraduate student Victor Arora on the optical/near-IR spectra of two unusual broad absorption line quasars, resulting in a poster by Mr. Arora at the 2006 Canadian Astronomical Society Annual Meeting)
- Winter 2005: Physics 1070 ‘Fundamentals of Astronomy’

- Fall 2004: Natural Sciences 1740 'Astronomy'

### External Research Funding

- 7/09-6/14**      **Ontario Early Researcher Award** *Outflows from disks of matter orbiting supermassive black holes* (\$100,000, matched with \$50,000 from York University)
- 5/07-4/12**      **NSERC Discovery Grant** *Connections Between Active Galactic Nuclei and Galaxy Bulges* (\$121,400)
- 5/05-4/07      NSERC Discovery Grant *Intrinsic Absorption in Sloan Digital Sky Survey Quasars* (\$45,800)
- 9/03-9/04      XMM-Newton A02 program *X-rays from Extreme Broad Absorption Line Quasars* (US\$38,000; Budgetary PI: Dr. Mike Brotherton)
- 5/03-4/04      *A Conference on Active Galactic Nuclei Physics with the Sloan Digital Sky Survey* (US\$6,000 to support the attendance of postdocs and graduate & undergraduate students actively working in the field; co-PI with Dr. Gordon Richards)

### Internal Research Funding

- 10/11-9/12      York University Faculty of Science and Engineering Established Researcher Award (\$3,000)
- 7/04-7/11      York University Start-Up Grant (\$33,000)

## Publications (Lifetime Summary)

Books: 0.5 (conference proceedings co-editor)  
 Chapters in books: 0  
 Papers in refereed journals: 165 (First author: 25)  
 Papers in refereed conference proceedings: 50 (First author: 9)  
 Technical reports: 0  
 Abstracts (unrefereed): 68 (First author: 19)  
 Other: 1

## Publications (Details, Current and Past 6 Calendar Years)

### Books

- “AGN Physics with the Sloan Digital Sky Survey,” ed. G. T. Richards & **P. B. Hall**, 2004 (ASP: San Francisco) [reviewed by Ross McLure in *The Observatory: A Review of Astronomy*, vol. 125, no. 1184, pp. 59-60 (2005)]

### Papers in Refereed Journals

(Key: AAS - American Astronomical Society; AJ - Astronomical Journal; ApJ - Astrophysical Journal; ApJL - Astrophysical Journal Letters; ApJS - Astrophysical Journal Supplement Series;

A&A - Astronomy & Astrophysics; A&AL - Astronomy & Astrophysics Letters; BAAS - Bulletin of the American Astronomical Society; MNRAS - Monthly Notices of the Royal Astronomical Society;

PASJ - Proceedings of the Astronomical Society of Japan; PASP - Proceedings of the Astronomical Society of the Pacific)

### Submitted

(Key to paper title fonts: **First Author**; *Heavy Involvement*; Some Contribution)  
 (Key to author fonts: Highly Qualified Personnel collaborators at York are underlined)

- “**Polar Broad Absorption Line Quasars: An Open Question**,” **Hall** & Chajet 2011, MNRAS, submitted May 2011 (arXiv:1105.1689)
- “Galaxies with Background QSOs, I: A Search for Strong Galactic H-alpha Lines,” York et al. 2011, MNRAS, submitted Oct. 2011
- “A Description of Quasar Variability Measured Using Repeated SDSS and POSS Imaging,” MacLeod et al. 2011, ApJ, submitted Dec. 2011 (arXiv:1112.0679)

### In Press

- “*Investigating Mg II Absorption in Paired Quasar Sight-Lines*,” Rogerson & **Hall**, MNRAS, in press (arXiv:1112.1729)

### Published

- “X-ray and Multiwavelength Insights into the Nature of Weak Emission-Line Quasars at Low Redshift,” Wu et al. 2012, ApJ, 747:10 (21pp)
- “Direct Evidence for Termination of Star Formation by Radiatively Driven Outflows in Reddened QSOs,” Farrah et al. 2012, ApJ, 745:178 (21pp)
- “C IV Emission and the Ultraviolet through X-ray Spectral Energy Distribution of Radio-Quiet Quasars,” Kruczek et al. 2011, AJ, 142:130 (12pp)
- “Biases in the Quasar Mass-Luminosity Plane,” Rafiee & **Hall** 2011, MNRAS, 415, 2932-2941
- “A Population of Intrinsically X-ray Weak Quasars: PHL 1811 Analogs at High Redshift,” Wu, Brandt, **Hall**, et al. 2011, ApJ, 736:28 (21pp)
- “A Catalog of Quasar Properties from SDSS DR7,” Shen et al. 2011, ApJS, 194:45 (21pp)
- “Supermassive Black Hole Mass Estimates Using Sloan Digital Sky Survey Quasar Spectra at  $0.7 < z < 2$ ,” Rafiee & **Hall** 2011, ApJS, 194:42 (15pp)
- “Unification of Luminous Type 1 Quasars through CIV Emission,” Richards et al. 2011, AJ, 141:167 (16pp)
- “Implications of Dramatic Broad Absorption Line Variability in the Quasar **FBQS J1408+3054**,” **Hall**, Anosov et al. 2011, White, Brandt, Gregg, Gibson, Becker & Schneider 2011, MNRAS, 411, 2653-2666
- “The Extreme High-Velocity Outflow in Quasar PG0935+417,” Rodriguez Hidalgo, Hamann & **Hall** 2011, MNRAS, 411, 247-259
- “Chandra Observations of Two Unusual BAL Quasars,” Rogerson, **Hall**, Snedden, Brotherton & Anderson 2011, New Astronomy, 16, 128-137
- “The Sloan Digital Sky Survey Quasar Lens Search IV. Statistical Lens Sample from the Fifth Data Release,” Inada et al. 2010, AJ, 140, 403-415
- “SDSS J094604.90+183541.8: A Gravitationally Lensed Quasar at  $z=4.8$ ,” McGreer, **Hall** et al. 2010, AJ, 140, 370-378
- “The Sloan Digital Sky Survey Quasar Catalog V. Seventh Data Release,” Schneider, Richards, Hall et al. 2010, AJ, 139, 2360-2373
- “Eight New Quasar Lenses from the Sloan Digital Sky Survey Quasar Lens Search,” Kayo, Inada, Oguri, Morokuma, **Hall**, Kochanek & Schneider, AJ, 139, 1614-1621

- “Detecting active comets in the SDSS,” Solontoi et al. 2010, *Icarus*, 205, 605-618
- “Optically Selected BL Lacertae Candidates from the Sloan Digital Sky Survey Data Release Seven,” Plotkin et al. 2010, *AJ*, 139, 390-414
- “A Public, K-Selected, Optical-to-Near-Infrared Catalog of the Extended Chandra Deep Field South (ECDFS) from the Multiwavelength Survey by Yale-Chile (MUSYC),” Taylor et al. 2009, *ApJS*, 183, 295-319
- “The Seventh Data Release of the Sloan Digital Sky Survey,” Abazajian et al. 2009, *ApJS*, 182, 543-558
- “Quasar Clustering from SDSS DR5: Dependences on Physical Properties,” Shen et al. 2009, *ApJ*, 697, 1656-1673
- “Clustering of Low-Redshift ( $z \leq 2.2$ ) Quasars from the Sloan Digital Sky Survey,” Ross et al. 2009, *ApJ*, 697, 1634-1655
- “GRB 080503: Implications of a Naked Short Gamma-Ray Burst Dominated by Extended Emission,” Perley et al. 2009, *ApJ*, 696, 1871-1885
- “A Catalog of Broad Absorption Line Quasars in the Sloan Digital Sky Survey Data Release 5,” Gibson, Jiang, Brandt, **Hall**, Shen, Wu, Anderson, Schneider, Vanden Berk, Gallagher, Fan & York 2009, *ApJ*, 692, 758-777
- “Observations of the Naked-Eye GRB 080319B: Implications of Nature’s Brightest Explosion,” Bloom, Perley, Li, Butler, Miller, Kocevski, Kann, Foley, Chen, Filippenko, Starr, Macomber, Prochaska, Chornock, Poznanski, Klose, Skrutskie, Lopez, **Hall** & Blake 2009, *ApJ*, 691, 723-737
- “Rapidly Spinning Black Holes: An Open Question,” Rafiee & **Hall** 2009, *ApJ*, 691, 425-430
- “Constraining the quasar population with the broad-line width distribution,” Fine, Croom, Hopkins, Hernquist, Bland-Hawthorn, Colless, **Hall**, Miller, Myers, Nichol, Pimblet, Ross, Schneider, Shanks & Sharp 2008, *MNRAS*, 390, 1413-1429
- “Multiwavelength Survey by Yale-Chile (MUSYC): Wide K-band Imaging, Photometric Catalogs, Clustering and Physical Properties of Galaxies at  $z \sim 2$ ,” Blanc, Lira, Barrientos, Aguirre, Francke, Taylor, Quadri, Marchesini, Infante, Gawiser, **Hall**, Willis, Herrera & Maza 2008, *ApJ*, 681, 1099-1115
- “Narrow associated QSO absorbers: clustering, outflows and the line-of-sight proximity effect,” Wild, Kauffmann, White, York, Lehnert, Heckman, **Hall**, Khare, Lundgren, Schneider & Vanden Berk 2008, *MNRAS*, 388, 227-241

- “A Nearby Old Halo White Dwarf Candidate from the Sloan Digital Sky Survey,” **Hall**, Kowalski, Harris, Awal, Leggett, Kilic, Anderson & Gates 2008, AJ, 136, 76-82; featured in a York University press release available at the YSSSTP website <http://www.ysimste.ca/projects/yssstp.html>
- “A Large Sample of BL Lac Objects from the SDSS and FIRST,” Plotkin, Anderson, **Hall**, Margon, Voges, Schneider, Stinson & York 2008, AJ, 135, 2453-2469
- “Additional Ultracool White Dwarfs Found in the Sloan Digital Sky Survey,” Harris, Gates, Gyuk, SubbaRao, Anderson, **Hall**, Munn, Liebert, Knapp, Bizyaev, Malanushenko, Malanushenko, Pan, Schneider & Smith 2008, ApJ, 679, 697-703
- “Average Properties of a Large Sample of  $z(\text{abs}) \sim z(\text{em})$  Mg II Absorption Line Systems,” Vanden Berk, Khare, York, Richards, Lundgren, Alsayyad, Kulkarni, SubbaRao, Schneider, Heckman, Anderson, Crotts, Frieman, Stoughton, Lauroesch, **Hall**, Meiksin, Steffing & Vanlandingham 2008, ApJ, 679, 239-259
- “C<sub>2</sub> in Peculiar DQ White Dwarfs,” **Hall** & Maxwell 2008, ApJ, 678, 1292-1297
- “Quasar Clustering at 25kpc/h from a Complete Sample of Binaries,” Myers, Richards, Brunner, Schneider, Strand, **Hall**, Blomquist & York 2008, ApJ, 635-646
- “Do Broad Absorption Line Quasars Live in Different Environments from Ordinary Quasars?,” Shen, Strauss, **Hall**, Schneider, York & Bahcall 2008, ApJ, 677, 858-862
- “The Sixth Data Release of the Sloan Digital Sky Survey,” Adelman-McCarthy et al. 2008, ApJS, 175, 297-313
- “The Black Hole-Bulge Relationship in Luminous Broad-Line Active Galactic Nuclei and Host Galaxies,” Shen, Vanden Berk, Schneider & **Hall** 2008, AJ, 135, 928-946
- “The Sloan Digital Sky Survey Quasar Lens Search. II. Statistical Lens Sample from the Third Data Release,” Inada, Oguri, Becker, Shin, Richards, Hennawi, White, Pindor, Strauss, Kochanek, Johnston, Gregg, Kayo, Eisenstein, **Hall** et al. 2008, AJ, 135, 496-511
- “The Sloan Digital Sky Survey Quasar Lens Search. III. Constraints on Dark Energy from the Third Data Release Quasar Lens Catalog,” Oguri, Inada, Strauss, Kochanek, Richards, Schneider, Becker, Fukugita, Gregg, **Hall** et al. 2008, AJ, 135, 512-519
- “On the Spectral Evolution of Cool, Helium-Atmosphere White Dwarfs: Detailed Spectroscopic and Photometric Analysis of DZ Stars,” Dufour, Bergeron, Liebert, Harris, Knapp, **Hall**, Strauss, Collinge & Edwards 2007, ApJ, 663, 1291-1308
- “The Fifth Data Release of the Sloan Digital Sky Survey,” Adelman-McCarthy et al. 2007, ApJS, 172, 634-644

- “A New Quadruply Lensed Quasar: SDSS J125107.57+293540.5,” Kayo, Inada, Oguri, **Hall**, Kochanek, Richards, Schneider, York & Pan 2007, AJ, 134, 1515-1521
- “**Acceleration and Substructure Constraints in a Quasar Outflow,**” **Hall**, Sadavoy, Hutsemekers, Everett & Rafiee 2007, ApJ, 665, 174-186
- “The Multiwavelength Survey by Yale-Chile (MUSYC): Deep Near-Infrared Imaging and the Selection of Distant Galaxies,” Quadri, Marchesini, van Dokkum, Gawiser, Franx, Lira, Rudnick, Urry, Maza, Kriek, Barrientos, Blanc, Castander, Christlein, Coppi, **Hall**, Herrera, Infante, Taylor, Treister & Willis 2007, AJ, 134, 1103-1117
- “Near-Infrared Properties of Moderate-Redshift Galaxy Clusters: Halo Occupation Number, Mass-to-Light Ratios and  $\Omega_M$ ,” Muzzin, A., Yee, H. K. C., **Hall**, P. B., and Lin, H., 2007, ApJ, 663, 150-163
- “*The Sloan Digital Sky Survey Quasar Catalog. IV. Fifth Data Release,*” Schneider, **Hall** et al. 2007, AJ, 134, 102-117
- “A Systematic Search for High Surface Brightness Giant Arcs in a Sloan Digital Sky Survey Cluster Sample, Estrada, Annis, Diehl, **Hall**, Las, Lin, Makler, Merritt, Scarpine, Allam & Tucker 2007, ApJ, 660, 1176-1185
- “*Near-Infrared Properties of Moderate-Redshift Galaxy Clusters: Luminosity Functions and Density Profiles,*” Muzzin, A., Yee, H. K. C., **Hall**, P. B., Ellingson, E., and Lin, H., 2007, ApJ, 659, 1106-1124
- “Clustering of High Redshift ( $z > 2.9$ ) Quasars from the Sloan Digital Sky Survey,” Shen, Strauss, Oguri, Hennawi, Fan, Richards, **Hall**, Gunn, Schneider, Szalay, Thakar, Vanden Berk, Anderson, Bahcall, Connolly & Knapp 2007, AJ, 133, 2222-2241
- “The UV Properties of SDSS-Selected Quasars,” Trammell, Vanden Berk, Schneider, Richards, **Hall**, Anderson & Brinkmann 2007, AJ, 133, 1780-1794
- “**A Quasar with Broad Absorption in the Balmer Lines,**” **Hall**, P. B. 2007, AJ, 133, 1271-1274
- “*Broad Absorption Line Variability in Repeat Quasar Observations from the Sloan Digital Sky Survey,*” Lundgren, Wilhite, Brunner, **Hall**, Schneider, York, Vanden Berk & Brinkmann 2007, ApJ, 656, 73-83
- “Cosmological Constraints from the Red-Sequence Cluster Survey,” Gladders, Yee, Majumdar, Barrientos, Hoekstra, **Hall** & Infante 2007, ApJ, 655, 128-134
- “Hubble Space Telescope Ultraviolet Spectroscopy of Fourteen Low-Redshift Quasars,” Ganguly et al. 2007, AJ, 133, 479-486

- “A Large, Uniform Sample of X-ray Emitting AGN from the ROSAT All-Sky and Sloan Digital Sky Surveys: the Data Release 5 Sample,” Anderson et al. 2007, *AJ*, 133, 313-329
- “Discovery of a Gravitationally Lensed Quasar from the Sloan Digital Sky Survey: SDSS J133222.62+034739.9,” Morokuma, Inada, Oguri, Ichikawa, Kawano, Tokita, Kayo, **Hall**, Kochanek, Richards, York & Schneider 2007, *AJ*, 133, 214-219
- “Two New Gravitationally Lensed Double Quasars from the Sloan Digital Sky Survey,” Inada, Oguri, Becker, White, Kayo, Kochanek, **Hall**, Schneider, York & Richards 2007, *AJ*, 133, 206-213
- “Chandra Observations of Red Sloan Digital Sky Survey Quasars,” **Hall**, Gallagher, Richards, Alexander, Anderson, Bauer, Brandt & Schneider 2006, *AJ*, 132, 1977-1988
- “Spectral Energy Distributions and Multiwavelength Selection of Type 1 Quasars,” Richards, Lacy, Storrie-Lombardi, **Hall**, Gallagher, Hines, Fan, Papovich, Vanden Berk, Trammell, Schneider, Vestergaard, York, Jester, Anderson, Budavari & Szalay 2006b, *ApJS*, 166, 470-497
- “Chandra Observations of SDSS J1004+4112: Constraints on the Lensing Cluster and Anomalous X-Ray Flux Ratios of the Quadruply Imaged Quasar,” Ota, Inada, Oguri, Mitsuda, Richards, Suto, Brandt, Castander, Fujimoto, **Hall**, Keeton, Nichol, Schneider, Eisenstein, Frieman, Turner, Minezaki & Yoshii 2006, *ApJ*, 647, 215-221
- “A Catalog of Broad Absorption Line Quasars from the Sloan Digital Sky Survey Third Data Release,” Trump, J. R., **Hall**, P. B., Reichard, Richards, Schneider, Vanden Berk, Knapp, Anderson, Fan, Brinkmann, Kleinman & Nitta 2006, *ApJS*, 165, 1-18 [cited in *Astrophysics in 2006*, Trimble et al. astro-ph/0705.1730]
- “Variable Faint Optical Sources Discovered by Comparing POSS and SDSS Catalogs,” Sesar, Svilkovic, Ivezić, Lupton, Munn, Finkbeiner, Steinhardt, Siverd, Johnston, Knapp, Gunn, Rockosi, Schlegel, Vanden Berk, **Hall**, Schneider & Brunner 2006, *AJ*, 131, 2801-2825
- “The SDSS Quasar Survey: Quasar Luminosity Function from Data Release Three,” Richards, G. T., Strauss, M. A., Fan, X., **Hall**, P. B., Jester, Schneider, Vanden Berk, Stoughton, Anderson, Brunner, Gray, Gunn, Ivezić, Kirkland, Knapp, Loveday, Meiksin, Pope, Szalay, Thakar, Yanny & York 2006a, *AJ*, 131, 2766-2787
- “Average Extinction Curves and Relative Abundances for QSO Absorption Line Systems at  $1 < z < 2$ ,” York, Khare, Vanden Berk, Kulkarni, Crotts, Lauroesch, Richards, Schneider, Welty, Alsayyad, Kumar, Lundgren, Shanidze, Smith, Vanlandingham, Baugher, **Hall**, Jenkins, Menard, Rao, Tumlinson, Turnshek, Yip & Brinkmann 2006, *MNRAS*, 367, 945-978

- “The Fourth Data Release of the Sloan Digital Sky Survey,” Adelman-McCarthy, J., et al. 2006, ApJS, 162, 38-48
- “Spectral Decomposition of Broad-Line AGNs and Host Galaxies,” Vanden Berk, Shen, Yip, Schneider, Connolly, Burton, Jester, **Hall**, Szalay & Brinkmann 2006, AJ, 131, 84-99
- “SDSS J102111.02+491330.4: A Newly Discovered Gravitationally Lensed Quasar,” Pindor, Eisenstein, Gregg, Becker, Inada, Oguri, **Hall**, Johnston, Richards, Schneider, Turner, Brasi, Hinz, Kenworthy, Miller, Barentine, Brewington, Brinkmann, Harvanek, Kleinman, Krzesinski, Long, Neilsen Jr., Newman, Nitta, Snedden & York 2006, AJ, 131, 41-48
- “Binary Quasars in the Sloan Digital Sky Survey: Evidence for Excess Clustering on Small Scales,” Hennawi, Strauss, Oguri, Inada, Richards, Pindor, Schneider, Becker, Gregg, **Hall**, Johnston, Fan, Burles, Schlegel, Gunn, Lupton, Bahcall, Brunner & Brinkmann 2006, AJ, 131, 1-23
- “Ultracompact AM CVn Binaries from the Sloan Digital Sky Survey: Three Candidates Plus the First Confirmed Eclipsing System,” Anderson, S. F., et al. 2005, AJ, 130, 2230-2236
- “SDSS J024634.11-082536.2: A New Gravitationally Lensed Quasar from the Sloan Digital Sky Survey,” Inada, Burles, Gregg, Becker, Schechter, Eisenstein, Oguri, Castander, **Hall**, Johnston, Pindor, Richards, Schneider, White, Brinkmann, Szalay & York 2005, AJ, 130, 1967-1976
- “*The Optical-Infrared Colors of CORALS QSOs: Searching for Dust Reddening Associated with High-Redshift Damped Ly $\alpha$  Systems*,” Ellison, S. L., **Hall**, P. B., & Lira, P. 2005, AJ, 130, 1345-1357
- “New Low Accretion-Rate Magnetic Binary Systems and their Significance for the Evolution of Cataclysmic Variables,” Schmidt, Szkody, Vanlandingham, Anderson, Barentine, Brewington, **Hall**, Harvanek, Kleinman, Krzesinski, Long, Margon, Neilsen, Newman, Nitta, Schneider & Snedden 2005, ApJ, 630, 1037-1053
- “*The SDSS View of the Palomar-Green Bright Quasar Survey*,” Jester, Schneider, Richards, Green, Schmidt, **Hall**, Strauss, Vanden Berk, Stoughton, Gunn, Brinkmann, Kent, Smith, Tucker & Yanny 2005, AJ, 130, 873-895
- “Magnetic White Dwarfs from the SDSS II. The Second and Third Data Releases,” Vanlandingham, Schmidt, Eisenstein, Harris, Anderson, **Hall**, Liebert, Schneider, Silvestri, Stinson & Wolfe, 2005, AJ, 130, 734-741
- “*The Sloan Digital Sky Survey Quasar Catalog III. Third Data Release*,” Schneider, **Hall** et al. 2005, AJ, 130, 367-380

- “Discovery of a Fifth Image of the Large Separation Gravitationally Lensed Quasar SDSS J1004+4112,” Inada, Oguri, Keeton, Eisenstein, Castander, Chiu, **Hall**, Hennawi, Johnston, Pindor, Richards, Rix, Schneider & Zheng 2005, PASJ, 57, L7-L10
- “*Optically Identified BL Lacertae Objects from the Sloan Digital Sky Survey*,” Collinge, M. J., Strauss, M. A., **Hall**, P. B., Ivezić, Munn, Schlegel, Zakamska, Anderson, Harris, Richards, Schneider, Voges, York, Margon & Brinkmann 2005, AJ, 129, 2542-2561 [Erratum for Tables: AJ, 131, 3135 (2006)]
- “An Empirical Calibration of the Completeness of the SDSS Quasar Survey,” Vanden Berk, Schneider, Richards, **Hall**, Strauss, Brunner, Fan, Baldry, York, Funn, Nichol, Meiksin & Brinkmann 2005, AJ, 129, 2047-2061
- “Active Galactic Nuclei in the Sloan Digital Sky Survey I. Sample Selection,” Hao, Strauss, Tremonti, Schlegel, Heckman, Kauffmann, Blanton, Fan, Gunn, **Hall**, Ivezić, Knapp, Krolik, Lupton, Richards, Schneider, Strateva, Zakamska, Brinkmann, Brunner & Szokoly 2005, AJ, 129, 1795-1808
- “Active Galactic Nuclei in the Sloan Digital Sky Survey II. Emission-Line Luminosity Function,” Hao, Strauss, Fan, Tremonti, Schlegel, Heckman, Kauffmann, Blanton, Gunn, **Hall**, Ivezić, Knapp, Krolik, Lupton, Richards, Schneider, Strateva, Zakamska, Brinkmann & Szokoly 2005, AJ, 129, 1783-1794
- “Discovery of Two Gravitationally Lensed Quasars with Image Separations of 3 Arcseconds from the Sloan Digital Sky Survey,” Oguri, Inada, Hennawi, Richards, Johnston, Frieman, Pindor, Strauss, Brunner, Becker, Castander, Gregg, **Hall**, Rix, Schneider, Bahcall, Brinkmann & York 2005, ApJ, 622, 106-115
- “The Third Data Release of the Sloan Digital Sky Survey,” Abazajian et al. 2005, AJ, 129, 1755-1759
- “Candidate Type II Quasars from the Sloan Digital Sky Survey: III. Spectropolarimetry Reveals Hidden Type I Nuclei,” Zakamska, Schmidt, Smith, Strauss, Krolik, **Hall**, Richards, Schneider, Brinkmann & Szokoly 2005, AJ, 129, 1212-1224
- “*X-ray Insights Into Interpreting CIV Blueshifts and Optical/UV Continua*,” Gallagher, Richards, **Hall**, Brandt, Schneider & Vanden Berk 2005, AJ, 129, 567-577

### Conference Proceedings

- “MHD Disk Winds and Line Width Distributions,” Chajet, L. S. & **Hall**, P. B. 2011, in “AGN Winds in Charleston,” in press
- “Monitoring Quasar Colour Variability in Stripe 82,” Rogerson, J. A., **Hall**, P. B., MacLeod, C. & Ivezić, Ž. 2011, in “AGN Winds in Charleston,” in press

- “Absorption-Line Variability of Broad Absorption Line Quasars,” Dietrich, M., et al. 2011, in “AGN Winds in Charleston,” in press
- “Direct Evidence for Termination of Star Formation by Radiatively Driven Outflows in Reddened QSOs,” Farrah et al. 2011, in “AGN Winds in Charleston,” in press
- “PHL 1811 Analogs: A Population of X-ray Weak Quasars,” Wu et al. 2011, in “AGN Winds in Charleston,” in press
- “Modeling Line Emission from Disk Winds,” **Hall**, P. B. & Chajet, L. S. 2010, in “Co-Evolution of Central Black Holes and Galaxies,” eds. Peterson, Somerville & Storchi-Bergmann, Proceedings of the International Astronomical Union, 267, 398-398
- “Clustering of Low-Redshift ( $z \leq 2.2$ ) Quasars from the Sloan Digital Sky Survey,” Ross et al. 2008, in “Classification and Discovery in Large Astronomical Surveys,” AIP Conference Proceedings, 1082, 186-190
- “Studying the Clustering and Black Hole Masses of Active Galactic Nuclei with the SDSS and Future Surveys,” Strauss, M.A., Shen, Y., Bahcall, N.A., & **Hall**, P. B. 2008, in “Panoramic Views of Galaxy Formation and Evolution,” ed. T. Kodama, T. Yamada & K. Aoki
- “The Black Hole-Bulge Relationship in Luminous Broad-Line Active Galactic Nuclei and Host Galaxies,” Shen, Vanden Berk, Schneider & **Hall** 2007, in “The Central Engine of Active Galactic Nuclei,” eds. Ho & Wang, 68-69
- “Evidence for the presence of dust in intervening QSO absorbers from the Sloan Digital Sky Survey,” Khare, P. et al. 2005, in “Probing Galaxies through Quasar Absorption Lines,” eds. Williams, Shu & Menard, 427-429
- “Detection of the 2175 Å dust feature from The Sloan Digital Sky Survey first and second data releases,” Wang, J., Ge, J., **Hall**, P. B., Prochaska, J. X., & Li, A. 2005, in “Probing Galaxies through Quasar Absorption Lines,” eds. Williams, Shu & Menard, 331-336
- “The Sloan Digital Sky Survey QSO absorption line catalogue,” York, D. G.. et al. 2005, in “Probing Galaxies through Quasar Absorption Lines,” eds. Williams, Shu & Menard, 58-64

### Abstracts

- “Investigating MgII Absorption in Paired Quasar Sight-Lines,” Rogerson & **Hall** 2011, Canadian Astronomy Society annual meeting 2011, #8S (awarded runner-up prize for 2nd best student poster at the meeting)

- “Near-IR through UV SEDs and Dust Reddening in SDSS Quasars,” Krawczyk et al. 2010, AAS meeting 215, #433.18
- “Blueshifting of CIV and the Baldwin Effect in 18,000 SDSS Quasars,” Kruczek et al. 2010, AAS meeting 215, #433.04
- “AGN Accretion Disk Winds and Emission-Line Blueshifts,” Chajet & **Hall** 2009, Canadian Astronomy Society annual meeting 2009, #P86
- “How Well Can We Measure Quasar Black Hole Masses from the C IV Line?,” Rafiee & **Hall** 2009, Canadian Astronomy Society annual meeting 2009, #P91
- “Keeping a Lensed Eye on the Intergalactic Medium,” Rogerson, **Hall**, Allam, Lin & Tucker 2009, Canadian Astronomy Society annual meeting 2009, #P123
- “Implications for the Number Density of Quasars at  $z > 4.8$  Using VIZJ Imaging from the BTC40 Multicolor Survey,” Bursick et al. 2008, AAS meeting 213, #447.08
- “Mining the Unknown in the Sloan Digital Sky Survey,” **Hall** 2008, oral presentation at the Royal Astronomical Society of Canada annual general assembly, June 2008; featured in a York University press release  
<http://www.yorku.ca/mediar/archive/Release.asp?Release=1468> and in Y-File June 30, 2008: <http://www.yorku.ca/yfile/archive/index.asp?Article=10758>
- “Newly Recognized QSO/Galaxy Pairs at Small Impact Parameters for Low Redshift Galaxies,” Quashnock et al. 2008, AAS meeting 212, #26.03
- “Improving Black Hole Mass Estimates,” Rafiee, A. and **Hall**, P. B. 2008, Canadian Astronomy Society annual meeting 2008, #P114
- “The X-ray Spectrum and Spectral Energy Distribution of FIRST J155633.8+351758: A Beamed Radio-Quiet Quasar with a Polar Outflow,” Berrington et al. 2008, AAS meeting 211, #64.05
- “Quasar Lifetimes and Black Hole Spins,” Rafiee, A. & **Hall**, P. B. 2008, AAS meeting 211, #45.21
- “CIV Blueshift as an Accretion Disk Wind Diagnostic,” Blomquist, J. A., Richards, G. T., **Hall**, P. B., et al. 2008, AAS meeting 211, #45.19
- “Supermassive Black Hole Mass Estimates Using Sloan Digital Sky Survey Quasar Spectra at  $z=0.7$  to  $2.1$ ,” Rafiee, A., & **Hall**, P. B. 2007, Canadian Astronomy Society annual meeting 2007, contributed talk by Mr. Rafiee
- “Education and Science with Transiting Exoplanets,” Delaney, P., **Hall**, P. B., Maxwell, A., Sadavoy, S., Ward, R., Hsu, S., 2007, Canadian Astronomy Society annual meeting 2007, #P20

- “IR confirmation of  $z > 5.5$  Quasar Candidates,” Chajet, L., **Hall**, P., Ward, R. et al. 2007, Canadian Astronomy Society annual meeting 2007, #P12
- “Broad Intrinsic Absorption in Sloan Digital Sky Survey Quasars,” **Hall**, P. B., et al. 2006, AAS meeting 208, #52.09
- “Supermassive Black Hole Mass Estimates Using Sloan Digital Sky Survey Quasar Spectra,” Rafiee, A., & **Hall**, P. B. 2006, AAS meeting 208, #52.07
- “The SDSS Quasar Survey: Greatest Hits (Volume 1),” **Hall**, P. B., et al. 2006, Canadian Astronomy Society annual meeting 2006, #P56
- “Supermassive Black Hole Mass Estimates Using Sloan Digital Sky Survey Quasar Spectra,” Rafiee, A., & **Hall**, P. B. 2006, Canadian Astronomy Society annual meeting 2006, #P55
- “Two Mysterious Quasars from the Sloan Digital Sky Survey,” Arora, V., **Hall**, P. B., et al. 2006, Canadian Astronomy Society annual meeting 2006, #P54
- “The Mid-IR/Optical Properties of Type 1 Quasars,” Richards, G., et al. 2005, AAS meeting 207, #140.02
- “DQ White Dwarfs in the Sloan Digital Sky Survey,” Halford, K., et al. 2005, AAS meeting 207, #131.02
- “Average Extinction Curves and Abundances at  $1 < z < 2$  from Mg II Absorption Systems,” Vanden Berk, D., et al. 2005, AAS meeting 207, #120.01
- “The Sloan Digital Sky Survey Data Release Three Broad Absorption Line Quasar Sample,” **Hall**, P. B., et al. 2005, invited talk at “AGN Winds in the Caribbean”
- “Broad Absorption Line Quasars from the Sloan Digital Sky Survey Data Release Three,” **Hall**, P. B. et al. 2005, AAS meeting 206, #11.08
- “Broad absorption line quasars: how to escape from (near) a black hole,” **Hall**, P. B. 2005, Canadian Astronomy Society annual meeting 2005, #B1.4

#### Other

- Two activities provided for *Astronomy In-Class Activities: Custom Edition for York University*, 2009, Pearson Custom Publishing

---

## Education and Public Outreach

- Guest on University of Cambridge Institute of Astronomy podcast *Astropod*, February 2011 (<http://www.ast.cam.ac.uk/astropod/>)
- Guest on astronomy Q&A show *Live from York U!* on Astronomy.fm internet radio, April 12, 2010
- Talk on "The Universe in 2009" at York University Dept. of Physics & Astronomy High School Science Teachers' Night, Fall 2009
- Solar System talk to two audiences at the David Dunlop Observatory, October 3, 2009
- Solar System talk to 6th grade students at Islington Junior Middle School, March 26, 2009
- Hosted American Astronomical Society Shapley Lecturer Dr. Niel Brandt for a public talk and a colloquium at York, January 2009
- Staffed Department of Physics & Astronomy booth at annual Canadian Undergraduate Physics Conference (one 3-hour shift), October 2008
- Staffed Faculty of Science & Engineering booth at Ontario Universities' Fair (one 3.5-hour shift), September 2008
- Quasars and Black Holes talk to amateur astronomers at the annual Huronia Star Party, August 30, 2008
- Solar System talk to 4th-8th grade students at King Edward Public School, June 12, 2008
- Invited Scientist, Royal Canadian Institute for the Advancement of Science Gala Fund-Raising Dinner, April 24, 2008
- Spearheaded installation of approved U50 anniversary activity "A Scale Model of the Solar System at York," consisting of plaques installed in the Petrie building, January 2008 - May 2010
- Talk on 'Teaching the Big Bang' at Science Teachers' Association of Ontario (STAO) annual conference, Nov. 17, 2007
- Talk on 'Thinking about the Big Bang' to the Winnipeg chapter of the Royal Astronomical Society of Canada, October 2007
- Participant in the inaugural Youth Science and Technology Outreach Program "YSTOP @ York" Astronomy evenings for 8th-grade students, May 31 & June 3, 2007
- Chaired three-person science fact talk on Extrasolar Planets at Ad Astra annual science fiction fan conference in Toronto, Mar. 3, 2007

- Talk on ‘Common Misconceptions in Astronomy’ at Science Teachers’ Association of Ontario (STAO) annual conference, Nov. 16, 2006
- Solar System talk to 8th grade students visiting York University, Nov. 15, 2006
- Departmental representative at the York University Graduate Open House, Nov. 11, 2006
- Interviewed for, and quoted in, Toronto Star article ‘Star-gazers praise plan to fix flagging Hubble’, Nov. 1, 2006
- Solar System talk to 4-6th grade students at the Ontario Science Center, Oct. 26, 2006
- Solar System talk to students at Cornerstone Academy, May 8, 2006
- Participation in evening stargazing event and panel talk on Planetariums at Ad Astra annual science fiction fan conference in Toronto, Apr. 1, 2006
- Solar System talk to visiting 8th grade students at York University, Nov. 17, 2005
- Solar System talk to 4-6th grade students at the Ontario Science Center, Oct. 25, 2005
- Galaxies and Our Universe talk to visiting high school students at York University, Dec. 8, 2004
- Solar System talk to visiting grade 10 students at York University, Nov. 9, 2004
- Public Sloan Digital Sky Survey talk to York University Astronomy Club, Sept. 28, 2004

### **Scientific Papers, Proposals, and Funding Applications Refereed**

- Paper for Astronomy & Astrophysics, October 2011 - present
- One proposal for the Netherlands Organisation for Scientific Research, November 2011
- One proposal for the Canada-France-Hawaii Telescope, October 2011
- One proposal each for the Canada-France-Hawaii and Gemini International Telescopes, April 2011
- One proposal for the Gemini International Telescopes, October 2010
- Paper for the Astrophysical Journal Letters, March 2010 - May 2010
- Paper for the Monthly Notices of the Royal Astronomical Society, December 2009 - July 2010
- Paper for the Astrophysical Journal, October 2009
- Paper for the Astrophysical Journal Letters, February 2008

- Paper for the Monthly Notices of the Royal Astronomical Society, January-February 2008
- One proposal for the Gemini International Telescopes, October 2007
- Paper for the Astrophysical Journal, January-May 2007
- Two proposals for the Gemini International Telescopes, April 2007
- One proposal for the Canada-France-Hawaii Telescope, April 2007
- Ontario Graduate Scholarship Panel Member, February 2007
- One proposal for the Gemini International Telescopes, October 2006
- One proposal for the Canada-France-Hawaii Telescope, October 2006
- Ontario Graduate Scholarship Panel Member, February 2006
- One proposal for the Gemini International Telescopes, April 2006
- One proposal for the Canada-France-Hawaii Telescope, April 2006
- One NSERC Discovery Grant proposal, January 2006
- Paper for the Astrophysical Journal, June-December 2005
- Paper for the Revista Mexicana de Astronomía y Astrofísica, March-October 2005
- One proposal for the Canada-France-Hawaii Telescope, October 2005
- Two proposals for the Gemini International Telescopes, October 2005
- Two proposals for the James Clerk Maxwell Telescope, April 2005
- One proposal for the Canada-France-Hawaii Telescope, April 2005
- One proposal for the Gemini International Telescopes, April 2005
- Paper for Astronomy & Astrophysics Letters, December 2004 - February 2005
- Paper for Astrophysical Journal Letters, December 2004
- Paper for Astrophysical Journal, September-December 2004
- One proposal for the Gemini International Telescopes, October 2004

### **Invited Colloquia and Seminars**

- Penn State University, Astronomy Dept. Seminar, October 2011

- York University, Dept. of Physics & Astronomy Colloquium, October 2011
- University of Cambridge Institute of Astronomy seminar, February 2011
- Ohio University, Dept. of Physics & Astronomy Astrophysical Institute Seminar, November 2010
- St. Mary's University, October 2008
- Queen's University, September 2008
- University of Manitoba, October 2007
- Michigan State University, April 2007
- University of Oklahoma, April 2005
- University of Waterloo, March 2005
- University of Virginia, March 2004
- Leiden University, February 2004
- University of Notre Dame, January 2004