

Jarrett Lawrence Johnson, Ph.D.

Contact Information

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Research Positions

- Postdoctoral Research Fellow, Theoretical Modeling of Cosmic Structures Group, Max Planck Institute for Extraterrestrial Physics (August 2009-present)
- Wendell Gordon Fellow, Department of Astronomy, University of Texas at Austin (2008-2009)
- Graduate Research Assistant, Department of Astronomy, University of Texas at Austin (2005-2008)

Research Interests

- Observable properties of the first galaxies
- Primordial and low-metallicity star formation
- Formation and growth of the first massive black holes
- Cosmological hydrodynamics and radiative transfer simulations
- Gamma-ray burst progenitor stars

Teaching Positions

- Graduate Teaching Assistant, University of Texas at Austin, Department of Astronomy (2004-2008)
Courses: Astrophysics, History of Astronomy (writing enhanced), Introduction to Astronomy, Introductory Astronomy, Astronomical Observations
- Academic Tutor, University of Texas at Austin, Athletics Department (2008-2009)

Education

The University of Texas at Austin (2004-2009)
Ph.D., Astronomy
Dissertation: *Star Formation in the Assembly of the First Galaxies*
Advisor: Dr. Volker Bromm

Truman State University, Kirksville, Missouri (2000-2004)
B.S., Physics, minors in Mathematics and Spanish

Fellowships and Awards

- Wendell Gordon Endowed University Fellowship (2008-2009)

- David Allen Benfield Memorial Scholarship, Dept. of Astronomy, University of Texas at Austin, in recognition of research as a senior graduate student (2008-2009)
- University of Texas Graduate School Continuing University Fellowship (2007-2008)
- Outstanding Master's Thesis Award, College of Natural Sciences, University of Texas at Austin (2007)
- Frank N. Edmonds Memorial Fellowship, Dept. of Astronomy, University of Texas at Austin, in recognition of research as a junior graduate student (2007)
- McDonald Observatory Board of Visitors Graduate Student Second Year Research Defense Award (2006)
- Office of Graduate Studies Professional Development Awards (2007, 2008, 2009)
- Graduated as valedictorian, with Departmental Honors, from Truman State University (2004)
- Outstanding Student in Physics at Truman State University (2004)
- Inducted into Phi Beta Kappa (2004)
- Inducted into national physics honor society Sigma Pi Sigma (2002)

Professional Activities

- Scientific Referee, *The Astrophysical Journal* (2009-present)
- American Astronomical Society (2007-present)
- President, Society of Physics Students, Truman State University (2003-2004)
- National Society of Physics Students (2002-present)

Invited Conference Talks

- "Accretion onto Black Holes Formed by Direct Collapse," *What drives the growth of black holes?*, Durham University, England (2010)
- "Observational Signatures of the First Galaxies," *The First Stars and Galaxies: Challenges for the Next Decade*, University of Texas, Austin, TX (2010)
- "Population III Star Clusters in the Reionized Universe," *First Stars Science Workshop*, University of Heidelberg (2009)
- "Black Hole Accretion in the First Galaxies," *Intermediate-Mass Black Holes: from First Light to Galactic Nuclei*, University of California, Irvine (2009)

Other Talks and Seminars

- OPINAS Group Meeting, Ringberg Castle, Tegernsee, Germany (2010)
- Los Alamos Astrophysics Seminar, Los Alamos National Lab (2009)
- Kavli Institute for Cosmological Physics, University of Chicago (2009)
- Truman State University, Physics Department (2009)
- Institute for Theory and Computation Seminar, Center for Astrophysics, Harvard University (2008)
- University of California Santa Cruz, Department of Astronomy & Astrophysics (2008)
- McDonald Observatory Board of Visitors summer meeting (2007)
- Texas Advanced Computing Center Summer Supercomputing Institute (2007)
- Astronomy Students Association, University of Texas at Austin (2007, 2009)