

joewolf

"I know nothing of any certainty, but the sight of stars makes me dream." - Vincent van Gogh

Education

2009-2012 Ph.D. (expected), Physics, University of California, Irvine.

Advisors: James S. Bullock, Manoj Kaplinghat

2007-2009 M.S., Physics, University of California, Irvine.

UC Chancellor's Fellow

2003-2007 B.S., Astrophysics, Rutgers College, Rutgers University.

summa cum laude, highest honors in Astrophysics, Cap & Skull

Research Interests

Dwarf galaxies, small scale cosmology, galaxy dynamics

Experience

Research

2007-present **Graduate Research**, University of California, Irvine.

- Supervised by James S. Bullock and Manoj Kaplinghat

2005-2007 Undergraduate Research, Rutgers University.

- Supervised by Tom Devlin, Jerry Sellwood, and Ted Williams

2005 Undergraduate Research, Princeton University.

- Supervised by Suzanne Staggs

Teaching

2008-2009 **Graduate Teaching Assistant**, *University of California, Irvine*.

Introduction to Cosmology 20B (two quarters), Physics Lab 3LB

2004-2007 Undergraduate Teaching Assistant, Rutgers University.

Calculus and Pre-calculus (111, 112, 115, 135, 136)

Select Laurels and Accolades

2007-2009 UC Chancellor's Graduate Fellowship (UC Irvine)

2006-2007 Barry M. Goldwater Scholarship (National)

2007 Cap & Skull Senior Honor Society (Rutgers College)

2007 Richard T. Weidner Physics Prize (Rutgers University)

2006 Mary Wheeler Wigner Memorial Physics Scholarship (Rutgers University)

2005 Herman Y. Carr Physics Scholarship (Rutgers University)

Students Supervised

2009-present PhD student with J. S. Bullock: Basilio J. Yniguez

Undergraduate student with M. Kaplinghat: Andrew Pace

2008-2009 Undergraduate students with J. S. Bullock: Frank F. Avedo (now a PhD student at

University of Florida) and Wade Curtis

Lead Author Publications

1. Accurate masses for dispersion-supported galaxies, **Joe Wolf**, Gregory D. Martinez, James S. Bullock, Manoj Kaplinghat, Marla Geha, Ricardo R. Munoz, Joshua D. Simon, Frank F. Avedo, accepted to MNRAS, arXiv:0908.2995

Co-Author Publications

1. Local Group Dwarf Spheroidals: Correlated Deviations from the Baryonic Tully-Fisher Relation, Stacy S. McGaugh & **Joe Wolf**, submitted to ApJ, arXiv:1003.3448

Nth Author Publications

- 1. Stealth Galaxies in the Halo of the Milky Way, James S. Bullock, Kyle R. Stewart, Manoj Kaplinghat, Erik J. Tollerud, **Joe Wolf** 2010, ApJ, 717, 1043
- 2. The SPLASH Survey: Internal Kinematics, Chemical Abundances, and Masses of the Andromeda I, II, III, VII, X, and XIV dSphs, Jason S. Kalirai, Rachael L. Beaton, Marla Geha, Karoline M. Gilbert, Puragra Guhathakurta, Evan N. Kirby, Steven R. Majewski, James C. Ostheimer, Richard J. Patterson, **Joe Wolf** 2010, ApJ, 711, 671

Invited Department Colloquia & Seminars

Modeling mass independent of anisotropy: A tool to test galaxy formation theories, Max-Planck-Institut fur Astronomie, Heidelberg, Germany, September 2009

Modeling mass independent of anisotropy: A tool to test galaxy formation theories, Astronomisches Rechen-Institut, Heidelberg, Germany, September 2009

Contributed Conference Talks

Modeling mass independent of anisotropy: A new advancement in galactic dynamics, IAU Symposium 271 on Astrophysical Dynamics: From Stars to Galaxies, Nice, France, June 2010

Cosmology in the kiddie pool: Connecting the small and large scales, Cosmology at the Beach, Playa del Carmen, Mexico, January 2010

Modeling mass independent of anisotropy: A tool to test galaxy formation, Hunting for the Dark: The Hidden Side of Galaxy Formation, Malta, October 2009

Modeling mass independent of anisotropy: A comparison between Andromeda and Milky Way satellites, IAU XXVII General Assembly, Joint Discussion 1: Dark Matter in Early-Type Galaxies, Rio de Janeiro, August 2009

Modeling mass independent of anisotropy: A comparison between Andromeda and Milky Way satellites (and musings on density slope determinations), Extreme Star Formation in Dwarf Galaxies, University of Michigan, July 2009

Modeling mass independent of anisotropy: A tool to test galaxy formation theories, Santa Fe 2009 Cosmology Summer Workshop, St. Johns College, July 2009

Modeling mass independent of anisotropy: A comparison between Andromeda and Milky Way satellites, Tidal Dwarf Galaxies: Ghosts from structure formation, Physikzentrum Bad Honnef, May 2009

Dark Matter Halos of M31 Galaxies, Theoretical Astrophysics in Southern California, UC Irvine, October 2008

Dark Matter Halos of M31 Galaxies, Santa Cruz Galaxy Workshop, UC Santa Cruz, August 2008

Department Journal Clubs & Lunch Talks

Accurate masses for dispersion-supported galaxies, Space Telescope Science Institute, Baltimore, MD, December 2009

Modeling mass independent of anisotropy: Connecting observations to simulations, University of Maryland, College Park, MD, December 2009

Modeling mass independent of anisotropy: Connecting observations to simulations, Institut d'Astrophysique de Paris, France, September 2009

Conference Posters

M31 vs. Milky Way: Dwarf Galaxy Masses, A Universe of Dwarf Galaxies, Lyon, France, June 2010

Local Group Stealth Galaxies: Fossils Of The First Galaxies, The First Stars and Galaxies: Challenges for the Next Decade, Austin, TX, March 2010

Anisotropy-independent mass modeling, The Milky Way and the Local Group: Now and in the Gaia Era, Heidelberg, Germany, September 2009

Anisotropy-independent mass modeling, Extracting and Interpreting Galaxy Masses, Kingston, Canada, June 2009

M31 Dwarf Galaxy Dark Matter Halos, Back to the Galaxy II, Santa Barbara, CA, October 2008

M31 Dwarf Galaxy Dark Matter Halos, 1st California Astronomy Postdoc Symposium, Santa Cruz, CA, August 2008

References

James S. Bullock, Associate Professor, Center for Cosmology, Frederick Reines Hall, University of California, Irvine, CA 92697

(P) 949.824.7727, (F) 949.824.2174, bullock@uci.edu

Manoj Kaplinghat, Associate Professor, Center for Cosmology, Frederick Reines Hall, University of California, Irvine, CA 92697

(P) 949.824.8541, (F) 949.824.2174, mkapling@uci.edu

Louis E. Strigari, Postdoctoral Fellow, 208 Physics & Astrophysics Building, Kavli Institute for Particle Astrophysics & Cosmology, Stanford University, Stanford, CA 94305 (P) 650.736.1774, strigari@stanford.edu