

Chris W. Purcell

CURRENT POSITION	Postdoctoral Research Associate Department of Physics and Astronomy University of Pittsburgh 401E Allen Hall 3941 O'Hara St. Pittsburgh, PA 15260 USA	<i>voice:</i> (949) 232-9273 <i>email:</i> cpurcell@pitt.edu <i>net:</i> www.chrispurcell.org
RESEARCH INTERESTS	isolated N -body simulation of galaxy formation/stability/disruption; analytic formulation of Λ CDM structure and self-interaction; connecting Local Group and external observations to analysis of cosmological simulations and their implications for precision modeling on both galactic and super-galactic scales	
EDUCATION	The University of California, Irvine , USA Ph.D., Physics and Astronomy , June 2010 <ul style="list-style-type: none">• Advisor: Professor James S. Bullock• Area of Study: Structure Formation Simulation• Thesis Topic: Galactic Disk-Satellite Interaction M.S., Physics and Astronomy , June 2007 <ul style="list-style-type: none">• Area of Study: Analytic ΛCDM Formulation Virginia Tech , Blacksburg, Virginia, USA B.S., Physics , June 2004 <ul style="list-style-type: none">• <i>Magna cum Laude</i>, With Honors in Physics• Minor in Astronomy	
AWARDS	<ul style="list-style-type: none">• Robert P. Hamilton Prize, Dept. of Physics, Virginia Tech, 2003• Phi Beta Kappa, Mu of Virginia, Virginia Tech, 2003• Hugh D. Ussery Scholarship, Dept. of Physics, Virginia Tech, 2002	
INSTRUCTION EXPERIENCE	<i>Substitute Teaching</i> (lecture sections @ Pitt): <ul style="list-style-type: none">• Astronomy 0113: Introduction to Astronomy, fall 2011 (for Prof. Jeff Newman) <i>Teaching Assistantships</i> (discussion sections, grading, office hours @ UC Irvine): <ul style="list-style-type: none">• Physics 20A: Introduction to Astronomy, spring 2005• Physics 52B: Circuits Lab, winter 2004• Physics 3LC: Basic Physics Laboratory, fall 2004 <i>Outreach/Extension</i> (volunteer work): <ul style="list-style-type: none">• Demo Presenter for SciTech Festival at Carnegie Science Center, Nov. 2011 (@ Pitt)• > 100 hours of astronomy outreach to local public schools, 2004 - 2008 (@ UC Irvine)	

TECHNICAL
SKILLS

Programming Proficiency

- proficient in: IDL, Topsy/PKDGRAV, GADGET2
- familiar with: C/C++, Fortran, Java, Mathematica

Operating Systems

- proficient in: Mac OS X, Linux, Windows

REFEREED
PUBLICATIONS

1st Author:

The Sagittarius Impact as an Architect of Spirality and Outer Rings in the Milky Way

Purcell, C. W., Bullock, J. S., Tollerud, E., Rocha, M., & Chakrabarti, S. 2011, *Nature*, Vol. 477, No. 7364, pp. 301-303

Heated Disk Stars in the Stellar Halo

Purcell, C. W., Bullock, J. S., & Kazantzidis, S. 2010, *MNRAS*, 404, 1711

The Dark Disk of the Milky Way

Purcell, C. W., Bullock, J. S., & Kaplinghat, M. 2009, *ApJ*, 703, 2275

The Destruction of Thin Stellar Disks via Cosmologically Common Satellite Accretion Events

Purcell, C. W., Kazantzidis, S., & Bullock, J. S. 2009, *ApJ*, 694, L98

The Metallicity of Diffuse Intrahalo Light

Purcell, C. W., Bullock, J. S., & Zentner, A. R. 2008, *MNRAS*, 391, 550

Shredded Galaxies as the Source of Diffuse Intrahalo Light On Varying Scales

Purcell, C. W., Bullock, J. S., & Zentner, A. R. 2007, *ApJ*, 666, 20

Nth Author:

The GHOSTS Survey. I. Hubble Space Telescope Advanced Camera for Surveys Data

Radburn-Smith, D., de Jong, R. S., Seth, A. C., Bailin, J., Bell, E. F., Brown, T. M., Bullock, J. S., Courteau, S., Dalcanton, J. J., Ferguson, H. C., Goudfrooij, P., Holfeltz, S., Holwerda, B. W., **Purcell, C.**, Sick, J., Streich, D., Vlajic, M., & Zucker, D. 2011, *ApJS*, 195, 18

The Assembly of Galaxy Clusters

Berrier, J. C., Stewart, K. R., Bullock, J. S., **Purcell, C. W.**, Barton, E. J., & Wechsler, R. H. 2009, *ApJ*, 690, 1292

Stellar Populations across the NGC 4244 Truncated Galactic Disk

de Jong, R. S., Seth, A. C., Radburn-Smith, D., Bell, E. F., Brown, T. M., Bullock, J. S., Courteau, S., Dalcanton, J. J., Ferguson, H. C., Goudfrooij, P., Holfeltz, S., Holwerda, B. W., **Purcell, C.**, Sick, J., Zucker, D. 2007, *ApJ*, 667, L49

PRESENTATIONS

Invited Talks

- [UC Santa Cruz Galaxy Formation Workshop](#), August 2011
- [Allegheny Observatory Public Lecture Series](#), University of Pittsburgh, May 2011
- [9th Annual Theoretical Astrophysics in Southern California Meeting](#), University of Southern California, October 2009
- [UC Santa Cruz Galaxy Formation Workshop](#), August 2009
- [CCAPP @ Ohio State University](#), special seminar on disk heating, January 2009
- [8th Annual Theoretical Astrophysics in Southern California Meeting](#), University of California, Irvine, October 2008
- [UC Santa Cruz Galaxy Formation Workshop](#), August 2008
- [UC Santa Cruz Galaxy Formation Workshop](#), August 2007

Posters

- [The Destruction of Thin Stellar Disks Via Cosmologically Common Mergers](#), [Galaxy Evolution: Emerging Insights and Future Challenges](#), UT Austin, November 2008
- [Shredded Galaxies as the Source of Diffuse Intrahalo Light on Varying Scales](#), Galactic Structure and Structure of Galaxies Workshop, Ensenada, Baja California, Mexico, March 2008

CONFERENCE
& SYMPOSIUM
PROCEEDINGS

Galactic Disk Transformation via Massive Satellite Accretion Events

Purcell, C. W., Kazantzidis, S., & Bullock, J. S. 2009, ASP Conf. Series Proceedings: [Galaxy Evolution: Emerging Insights and Future Challenges](#), Vol. 419, pp. 248

Mergers and Disk Survival in Λ CDM

Bullock, J. S., Stewart, K. R., & **Purcell, C. W.** 2009, IAU Symposium Proceedings: [The Galaxy Disk in Cosmological Context](#), Vol. 254, pp. 85

GHOSTS: The Resolved Stellar Outskirts of Massive Disk Galaxies

de Jong, R. S., Seth, A. C., Bell, E. F., Brown, T. M., Bullock, J. S., Courteau, S., Dalcanton, J. J., Ferguson, H. C., Goudfrooij, P., Holfeltz, S., **Purcell, C.**, Radburn-Smith, D., & Zucker, D. 2007, IAU Symposium Proceedings: [Stellar Populations as Building Blocks of Galaxies](#), Vol. 241, pp. 503