

# CHARLOTTE R. CHRISTENSEN

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## Office Address

Physics Department  
Grinnell College  
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## Contact Information

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**Current Position** GRINNELL COLLEGE *Aug. 2014 – present*  
Assistant Professor of Physics

**Education** UNIVERSITY OF WASHINGTON *Aug. 2011*  
Ph.D. in Astronomy  
Dissertation: “The Connection Between Molecular Hydrogen and Star Formation in Cosmological Simulations” with adviser Tom Quinn

CARLETON COLLEGE *June 2005*  
B.A. in Physics and Astronomy, distinction in major and magna cum laude

**Honors** NSF Graduate Research Fellow *2008 – 2011*  
NSF Graduate Teaching Fellow in K-12 Education *2007 – 2008*

**Research Interests & Experience** COMPUTATIONALLY MODELING THE ROLE OF STELLAR FEEDBACK AND THE INTER-  
STELLAR MEDIA IN GALAXY EVOLUTION

- Measured properties and effects of galactic outflows across halo mass

THEORY POSTDOCTORAL FELLOW, UNIVERSITY OF ARIZONA *2011 – 2014*  
Supervisors: Romeel Davé & Desika Narayanan

- Analyzing the evolution of the interstellar in connection to star formation and supernova feedback

GRADUATE RESEARCH ASSISTANT, UNIVERSITY OF WASHINGTON *2005 – 2011*  
Supervisors: Tom Quinn & Fabio Governato

- Incorporated a model for the formation, shielding and destruction of H<sub>2</sub>, a radiative transfer calculation, and an H<sub>2</sub>-based star formation recipe into the Smoothed-Particle Hydrodynamic galaxy-formation code, GASOLINE
- Analyzed the effects of using an H<sub>2</sub>-based star formation recipe on the star formation history and matter distribution in dwarf and spiral galaxies
- Analyzed the effect of resolution on star formation and feedback in simulations over a range of galactic masses

GRADUATE RESEARCH ASSISTANT, UNIVERSITY OF WASHINGTON *2006 – 2007*  
Supervisor: Julianne Dalcanton

- Used model isochrones to characterize the tip of the red giant branch of extra-galactic resolved stellar populations

**Student Mentoring** MENTORED ADVANCED PROJECT, GRINNELL COLLEGE *Summer 2015 – current*  
Nicole Arredondo (2017): “Galaxy Modeling Research” (poster at 2018 AAS meeting)

Patrick Sheehan-Klenk (2017): “Galaxy Modeling Research” (poster at 2018 AAS meeting)

Lindsey Byrne (2017): “Modeling Star Formation” (poster at 2018 AAS meeting)

Michael Nattinger (2016): “Simulating the Circum-galactic Media” (poster at 2017 AAS meeting)

Marios Tsekitsidis (2016): “Star Formation Prescription”

Lindsey Byrne (2016): “Comparing Supernovae Feedback” (poster at 2017 AAS meeting)

Andrew Wills (2015): “Simulated Galaxy Analysis,” (poster at 2016 AAS meeting)

UNIVERSITY OF ARIZONA *Spring 2013 – Spring 2014*  
Ian Cates: “Changes to Dark Matter Profiles During Dwarf Galaxy Mergers,” (poster at 2014 AAS meeting)

PRE-MAP, UNIVERSITY OF WASHINGTON *Fall 2007 – Spring 2009*  
Laroy Chase (2008-09): “Star Formation in Simulated Galaxies through Mock-Observations”  
Whitney Kropat (2007-08): “Stellar Profiles of Simulated Galaxies”

**Teaching Experience** PHY 131 – GENERAL PHYSICS I *Fall 2016 and 2014*  
Primary instructor for an introductory calculus-based physics class on Newtonian mechanics. I employed a variety of pedagogical techniques, including interactive lectures with think-pair-share questions, in-class group problem solving, and demonstrations. The class met three days a week for fifty minutes and consisted of twenty-three students.

PHY 116 – THE UNIVERSE & ITS STRUCTURE *Fall 2016, 2015, and 2014*  
Primary instructor for an introductory astronomy for non-majors, which covered naked-eye observing, stellar evolution, galactic evolution, and cosmology. I employed a variety of pedagogical techniques, including interactive lectures with think-pair-share questions, in-class problem solving with tutorials, demonstrations, and discussions. The class met three days a week for fifty minutes and consisted of twenty-four (twenty-two) students.

PHY 234 – MECHANICS *Spring 2017, 2016, & 2015*  
Primary instructor for a mid-level majors’ course covering Newtonian, Lagrangian, and Hamiltonian mechanics. I incorporated in-class group problem solving, computer lab exercises, and demos into a standard lecture format. The classes met three days a week for fifty minutes and consisted of about twenty-four students

PHY 234L – MECHANICS LAB *Spring 2017 & 2016*  
Primary instructor and co-creator of a computational lab to complement the Mechanics class. Students created programs in python to examine physical systems such as damped, driven oscillators, three-body gravitational motion, and a chaotic pendulum. The class met weekly for three hours and consisted of six students.

PHY 395 – GALACTIC ASTROPHYSICS AND COSMOLOGY *Spring 2017 & 2016*

Primary instructor for an upper-level majors' course covering cosmology and galactic structure and evolution. Class consisted of a mix of discussion of primary research, group problem solving, and standard lecture. The classes met two days a week for eighty minutes and consisted of eleven students

TUT 100 – ARCHAEOASTRONOMY *Fall 2015*

Primary instructor for a first-year tutorial course. This class introduces students to basic college reading, writing, discussion, presenting, and research skills within the context of cultural astronomy. The class met twice a week for an hour and fifty minutes and consisted of thirteen students.

GLC 195 – VIOLENT UNIVERSE/EXOPLANET *Summer 2015*

Served as the faculty advisor for a student taking online courses about compact object and exoplanet astrophysics. We met twice weekly to discuss the material, and I assigned weekly problem sets and supervised her final project on the material..

PHY 132 – GENERAL PHYSICS II *Spring 2015*

Primary instructor for an introductory calculus-based physics class on electricity and magnetism. I used similar pedagogical techniques as in PHY 131, 2014. The class met three days a week for fifty minutes and consisted of thirty students.

PHY 132L – GENERAL PHYSICS II LAB *Spring 2015*

Primary instructor for the lab component on an introductory electricity and magnetism class. Students investigated such topics as circuits, magnetic fields, and the diffraction and interference of light. The class met weekly for three hours and consisted of sixteen students.

PHY 232L – MODERN PHYSICS LAB *Fall 2013*

Primary instructor for the laboratory component of the third class in the physics major sequence. This class included nuclear physics labs, such as Compton scattering and Nuclear Magnetic Resonance, and computer simulations illustrating concepts from special relativity. The class met weekly for three hours and consisted of twelve students.

ASTR 170 – THE PHYSICAL UNIVERSE, UNIVERSITY OF ARIZONA *Summer 2013*

Primary instructor for an introductory astronomy for non-majors.

ASTR 101 – ASTRONOMY, UNIVERSITY OF WASHINGTON *Summer 2009*

Primary instructor for an introductory astronomy course for non-majors.

NSF GRADUATE TEACHING FELLOW IN K-12 EDUCATION *2007 – 2008*

Assisted math instruction for a second and third grade class in a low-performing elementary school. I spent two half-days a week supporting the teachers through a combination of leading class, planning activities, and working with individual students.

TEACHING ASSISTANT, UPWARD BOUND *Summer 2006*

Led a daily astronomy discussion section for approximately twenty select high school students. The mission of Upward Bound is college-readiness for low-income and first-generation college students.

TEACHING ASSISTANT, UNIVERSITY OF WASHINGTON *6 sections, 2005 – 2006*

Led discussion sections for introductory astronomy and solar system courses. The discussion sections met twice weekly for an hour each and consisted of about 25 students.

TEACHING ASSISTANT, CARLETON COLLEGE *8 courses, 2003 – 2005*  
Assisted in labs and led tutoring sessions for introductory physics and astronomy courses, including an evening observational astronomy course.

**Invited  
Talks**

ARTHUR M. WOLFE SYMPOSIUM IN ASTROPHYSICS *March 2018*  
“IN THE HALOS OF DWARF GALAXIES”  
*Esalen Institute, Big Sur, CA*

COMPUTATIONAL GALAXY FORMATION WORKSHOP *March 2018*  
“THE FLOW OF GAS THROUGH DWARF GALAXIES”  
*Ringberg Castle, Rottach-Egern, Germany*

CCA LUNCH TALK *December 2017*  
“JUGGLING GAS AND METALS: EXPLORING THE ROLE OF OUTFLOWS IN GALAXY EVOLUTION”  
*Center for Computational Astrophysics, New York, NY*

PHYSICS SEMINAR *October 2017*  
“JUGGLING GAS AND METALS: EXPLORING THE ROLE OF OUTFLOWS IN GALAXY EVOLUTION”  
*Georgia Tech, Atlanta, GA*

CHANGING FACE OF GALAXIES *September 2016*  
“SIMULATING THE GAS CYCLE IN GALAXIES”  
*Hobart, Australia*

COMPUTATIONAL GALAXY FORMATION WORKSHOP *May 2016*  
“THE CYCLING OF GAS AND METALS IN SIMULATED DWARF AND SPIRAL GALAXIES”  
*Ringberg Castle, Rottach-Egern, Germany*

PHYSICS SEMINAR *April 2016*  
“THE CYCLE OF BARYONS: HOW GAS IS GAINED AND LOST FROM GALAXIES”  
*Luther College, Decorah, IA*

LUVIOR SEMINAR *January 2016*  
“GALAXY GROWTH AS SEEN THROUGH SIMULATIONS AND MODELS”  
*NASA’s Goddard Space Flight Center, Greenbelt, MD*

ASTRONOMY COLLOQUIUM *November 2015*  
“HOW GAS IS GAINED AND LOST FROM GALAXIES”  
*University of Minnesota, St. Paul, MN*

PHYSICS SEMINAR *November 2014*  
“THE CYCLE OF BARYONS: HOW GAS IS GAINED AND LOST FROM GALAXIES”  
*Macalester College, St. Paul, MN*

GRAVITY’S LOYAL OPPOSITION WORKSHOP *June 2014*  
“TRACKING OUTFLOW PROPERTIES ACROSS GALAXY MASS”  
*Kavli Institute for Theoretical Physics, Santa Barbara, CA*

GAS IN AND AROUND GALAXIES WORKSHOP *May 2014*  
“TRACKING BARYON CYCLING ACROSS GALAXY MASS”  
*Ringberg Castle, Rottach-Egern, Germany*

PHYSICS SEMINAR *November 2013*  
“HOW TO GROW A GALAXY: TURNING GAS INTO STARS ACROSS THE HISTORY OF THE  
UNIVERSE”  
*Grinnell College, Grinnell, IA*

REGULATION OF STAR FORMATION IN MOLECULAR GAS WORKSHOP *June 2013*  
“MOLECULAR HYDROGEN DEPENDENT STAR FORMATION IN LOW METALLICITY EN-  
VIRONMENTS”  
*Ringberg Castle, Rottach-Egern, Germany*

DISC GALAXY FORMATION IN A COSMOLOGICAL CONTEXT *May 2012*  
*Max-Planck-Institut fur Astronomie, Heidelberg, Germany*

ASTRONOMY COLLOQUIUM *March 2012*  
*University of Wisconsin, Madison, WI*

THEORETICAL ASTROPHYSICS PROGRAM SEMINAR SERIES *November 2011*  
*University of Arizona, Tucson, AZ*

**Service**

JOURNAL REFEREE: MNRAS, APJ

PARTICIPANT IN GRINNELL SCIENCE PROJECT NEW STUDENT ORIENTATION  
*Fall 2015 – present*

Participated in the welcome meal with students and parents and represented the physics department on an informational panel.

ORGANIZER FOR THE GRINNELL WOMEN IN PHYSICS GROUP *2014 – present*  
Help organize and host community-building events for women physics majors at Grinnell.

ORGANIZER FOR THE ASTRONOMY GROUP *2014 – present*  
Runs a weekly, hour-long meeting for student and faculty to discuss recent astronomical discoveries.

OPEN INTERNSHIP GRANT SELECTION *Fall 2016 – Spring 2018*  
Serves on committee to select students to receive stipends for unpaid off-campus internships.

PHYSICS SEMINAR SERIES ORGANIZER *Fall 2016 – Spring 2017*  
Organize weekly seminar series for the Grinnell Physics Department

EARLY CAREER FACULTY AND STAFF COORDINATOR *Summer 2016 – Spring 2017*  
Organize workshops, talks and other events for the Early Career Faculty and Staff.

CURRICULUM DEVELOPMENT FOR PHY-132 *Fall 2015 – Spring 2017*  
Working with Professors Kempton and Tjossem to develop computational labs for the mechanics course.

MEMBER OF TENURE-TRACK AND TERM SEARCHS

*Fall 2014 & 2017, Spring 2016 & 2017*

Participated in the evaluation of application materials and the interviewing of candidates.

MEMBER OF THE AGORA SIMULATIONS COMPARISON PROJECT

*2012 – 2014*

A representative of the GASOLINE code and an expert on the interstellar media in a high-resolution galaxy simulations comparison project.

PARTICIPANT IN THE WOMEN IN SCIENCE FORUM

MENTORSHIP PROGRAM

*2011 – 2014*

Mentored a female astronomy graduate student at the University of Arizona.

PRE-MAJOR IN ASTRONOMY PROGRAM (PRE-MAP)

*2006 – 2011*

Active staff member for a program to increase diversity in astronomy. Organized meetings, applied for funding, and ran a monthly journal club about diversity in the sciences.

WEBMISTRESS FOR THE UNIVERSITY OF WASHINGTON,

ASTRONOMY DEPARTMENT

*2006 – 2008*

Maintained the department website. Created a computing wiki to disseminate information about the department computer system.

SENATOR, GRADUATE AND PROFESSIONAL STUDENT SENATE

*2005 – 2008*

Represented Astronomy graduate students in shared governance body.

DEPARTMENTAL CURRICULUM ADVISER

CARLETON COLLEGE PHYSICS DEPARTMENT

*2002 – 2005*

Student representative in the on-going development of the physics department curricula.

STUDENT DEPARTMENTAL ADVISER

CARLETON COLLEGE PHYSICS DEPARTMENT

*2004 – 2005*

Provided junior students with advice on majoring in physics, including course selection and research opportunities.

**Public  
Outreach**

ADULT COMMUNITY EXPLORATION SERIES (ACES)

*Summer 2016*

Taught two-session course on Archaeoastronomy for Grinnell community members.

STEWARD OBSERVATORY PUBLIC OBSERVING NIGHTS

*Fall 2013 – Winter 2014*

Volunteer telescope operator for the Ray White Jr. Reflector (21-inch telescope) during public observing nights, which occur approximately six times per term and draw 50 to 100 people.

PUBLIC SCIENCE LECTURES

- Steward Observatory Public Evening Lecture Series (March 2013)
- UW Engage Lecture Series (February 2011)
- UW Engage Lecture Series (March 2010)

UNIVERSITY OF WASHINGTON PLANETARIUM

*2005 – 2011*

Volunteer presenter for approximately six shows a year for community school groups.

INSTRUCTOR, CREATIVE RETIREMENT INSTITUTE

*Fall 2009*

Primary instructor for a two-session, introductory class on galactic structure for retired adults.

SPACE SCIENCE NETWORK NORTHWEST (S2N2)

*2007*

Managed the S2N2 webpage, planned outreach events, and was an assistant instructor for classes on how to incorporate space science into elementary classrooms.

## PUBLICATIONS

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- First- Author Publications**      **Under review**  
OUFLOWING METALS  
**Christensen, C.**; Davè, R.; Brooks, A.; Quinn, T.; Shen, S.; 2018, *submitted to ApJ*
- Published or accepted for publication**  
IN-N-OUT: THE GAS CYCLE FROM DWARFS TO SPIRAL GALAXIES  
**Christensen, C.**; Davè, R.; Governato, F.; Pontzen, A.; Brooks, A.; Munshi, F.; Quinn, T.; Wadsley, J.; 2016, *ApJ*, 824, 1
- SIMULATING DISK GALAXY BULGES THAT ARE CONSISTENT WITH OBSERVED SCALING RELATIONS  
**Christensen, C.**; Brooks, A.; Fisher, D.; Governato, F.; McCleary, J.; Quinn, T.; Sijing, S.; Wadsley, J.; 2014, *MNRAS*, 440, 1, L51
- THE EFFECT OF MODELS OF THE INTERSTELLAR MEDIA ON THE CENTRAL MASS DISTRIBUTION OF GALAXIES  
**Christensen, C.**; Governato, F.; Quinn, T.; Brooks, A.; Shen, S.; McCleary, J.; Fisher, D.; Wadsley, J.; 2014, *MNRAS*, 440, 3, 2843
- IMPLEMENTING MOLECULAR HYDROGEN IN HYDRODYNAMIC SIMULATIONS OF GALAXY FORMATION  
**Christensen, C.**; Quinn, T.; Governato, F.; Stilp, A.; Shen, S.; Wadsley, J.; 2012 *MNRAS*, 425, 4
- STAR FORMATION AND FEEDBACK IN SMOOTHED PARTICLE HYDRODYNAMIC SIMULATIONS. II. RESOLUTION EFFECTS  
**Christensen, C.**; Quinn, T.; Stinson, G.; Bellovary, J.; Wadsley, J.; 2010, *ApJ*, 717, 1
- Other Publications**      **Published or accepted for publication**  
SOWING BLACK HOLE SEEDS: DIRECT COLLAPSE BLACK HOLE FORMATION WITH REALISTIC LYMAN-WERNER RADIATION IN COSMOLOGICAL SIMULATIONS  
Dunn, G.; Bellovary, J.; Holley-Bockelmann, K.; **Christensen, C.**; Quinn, T.; 2018 *ApJ*, 861, 1
- BETA DIPS IN THE GAIA ERA: SIMULATION PREDICTIONS OF THE GALACTIC VELOCITY ANISOTROPY PARAMETER FOR STELLAR HALOS  
Loebman, S.; Valluri, M.; Hattori, K.; Debattista, V.; Bell, E.; Stinson, G.; **Christensen, C.**; Brooks, A.; Quinn, T.; Governato, F.; 2017 *ApJ*, 853, 2
- A UNIFIED MODEL FOR AGE-VELOCITY DISPERSION RELATIONS IN LOCAL GROUP GALAXIES: DISENTANGLING ISM TURBULENCE AND LATENT DYNAMICAL HEATING  
Leaman, R.; Mendel, J.; Wisnioski, E.; Brooks, A.; Beasley, M.; Starkenburg, E.; Martig, M.; Battaglia, G.; **Christensen, C.**; Cole, A.; de Boer, T.; Wills, D.<sup>1</sup>; 2017 *MNRAS*, 472, 2, 1879-1896

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<sup>1</sup>Undergraduate research student

HOW TO RECONCILE THE OBSERVED VELOCITY FUNCTION OF GALAXIES WITH THEORY

Brooks, A.; Papastergis, E.; **Christensen, C.**; Governato, F.; Stilp, A.; Quinn, T.; Wadsley, J.; 2017 *ApJ*, 850, 1, 97-112

THE ROLE OF BARYONS IN CREATING STATISTICALLY SIGNIFICANT PLANES OF SATELLITES AROUND MILKY WAY-MASS GALAXIES

Ahmed, S.; Brooks, A.; **Christensen, C.**, 2017 *MNRAS*, 466, 3, 3119-3132

THE EFFECTS OF HOST GALAXY PROPERTIES ON MERGING COMPACT BINARIES DETECTABLE BY LIGO O'Shaughnessy, R.; Bellovary, J.; Brooks, A.; Shen, S.; Governato, F.; **Christensen, C.**; 2017 *MNRAS*, 464, 3, 2831-2839

BULGE FORMATION VIA MERGERS

Brooks, A. & **Christensen, C.**, 2016, *Galactic Bulges*, edited by E. Laurikainen, R. Peletier, D. Gadotti, Springer (Peer-reviewed invited review paper)

CONSEQUENCES OF BURSTY STAR FORMATION ON GALAXY OBSERVABLES AT HIGH REDSHIFTS

Domnguez, A.; Siana, B.; Brooks, A.; **Christensen, C.**; Bruzual, G.; Stark, D.; Alavi, A.; 2015 *MNRAS*, 451, 1, 839-848

FAINT DWARFS AS A TEST OF DM MODELS: WDM VS. CDM

Governato, F.; Weisz, D.; Pontzen, A.; Loebman, S.; Reed, D.; Brooks, A.; Behroozi, P.; **Christensen, C.**; Madau, P.; Mayer, L., Shen, S.; Matthew, W.; Quinn, T.; Keller, B., Wadsley, J.; 2015 *MNRAS*, 481, 1, 792-803

EFFECTS OF INCLINATION ON MEASURING VELOCITY DISPERSION AND IMPLICATIONS FOR BLACK HOLES

Bellovary, J.; Holley-Bockelmann, K.; Gltekin, K.; **Christensen, C.**; Governato, F.; Brooks, A.; Loebman, S.; Munshi, F.; 2014, *MNRAS*, 445, 3, 2667

THE MILKY WAY TOMOGRAPHY WITH SLOAN DIGITAL SKY SURVEY. V. MAPPING THE DARK MATTER HALO

Loebman, S.; Ivezić, Ž.; Quinn, T.; Bovy, J.; **Christensen, C.**; Juric, M.; Roskar, R.; Brooks, A.; Governato, F.; 2014, *ApJ*, 794, 2, 151

GALAXY FORMATION WITH LOCAL PHOTOIONISATION FEEDBACK I. METHODS

Kannan, R.; Stinson, G.; Macció, A.; Hennawi, J.; Woods, R.; Wadsley, J.; Shen, S.; Robitaille, T.; Cantalupo, S.; Quinn, T.; **Christensen, C.**; 2014, *MNRAS*, 437, 3, 2882

THE AGORA HIGH-RESOLUTION GALAXY SIMULATIONS COMPARISON PROJECT

Kim, J.-h.; et al. (among twenty-eight co-authors for the AGORA collaboration); 2014, *ApJS*, 210, 1, 14

THE PRESSURE OF THE STAR FORMING ISM IN COSMOLOGICAL SIMULATIONS

Munshi, F.; **Christensen, C.**; Quinn, T.; Governato, F.; Wadsley, J.; Loebman, S.; Shen, S.; 2014, *ApJL*, 781, 1, L14

REPRODUCING THE STELLAR MASS/HALO MASS RELATION IN SIMULATED  $\Lambda$ CDM GALAXIES: THEORY VS. OBSERVATIONAL ESTIMATES

Munshi, F.; Governato, F.; Brooks, A. M.; **Christensen, C.**; Shen, S.; Loebman, S.; Moster, B.; Quinn, T.; Wadsley, J.; 2013, *ApJ*, 766, 1, 56

BARYONS MATTER: WHY LUMINOUS SATELLITE GALAXIES HAVE REDUCED CENTRAL MASSES

Zolotov, A.; Brooks, A.; Willman, B.; Governato, F.; Pontzen, A.; **Christensen, C.**; Dekel, A.; Quinn, T.; Shen, S.; Wadsley, J.; 2012, *ApJ*, 76, 1, 71

CONSTRAINTS ON THE SHAPE OF THE MILKY WAY DARK MATTER HALO FROM JEANS EQUATIONS APPLIED TO SLOAN DIGITAL SKY SURVEY DATA

Loebman, S.; Ivezić, Ž.; Quinn, T.; Governato, F.; Brooks, A.; **Christensen, C.**; Jurić, M.; 2012, *ApJL*, 758, 1, L23

HIGH VELOCITY DISPERSION IN A RARE GRAND-DESIGN SPIRAL GALAXY AT REDSHIFT  $z = 2.18$

Law, D.; Shapley, A.; Steidel, C.; Reddy, A.; **Christensen, C.**; Erb, D.; 2012, *Nature*, 487, 7407, 338

CUSPY NO MORE: HOW OUTFLOWS AFFECT THE CENTRAL DARK MATTER AND BARYON DISTRIBUTION IN COLD DARK MATTER GALAXIES

Governato, F.; Zolotov, A.; Pontzen, A.; **Christensen, C.**; Oh, S. H.; Brooks, A.; Quinn, T.; Shen, S.; Wadsley, J.; 2012, *MNRAS*, 422, 2, 1231

FORMING A LARGE DISC GALAXY FROM A  $z < 1$  MAJOR MERGER

Governato, F.; Brook, C.; Brooks, A.; Mayer, L.; Willman, B.; Jonsson, P.; Stilp, A.; Pope, L.; **Christensen, C.**; Wadsley, J.; Quinn, T., 2009, *MNRAS*, 398, 1, 312

THE ACS NEARBY GALAXY SURVEY TREASURY

Dalcanton, J.; Williams, B.; Seth, A.; Dolphin, A.; Holtzman, J.; Rosema, K.; Skillman, E.; Cole, A.; Girardi, L.; Gogarten, S.; Karachentsev, I.; Olsen, K.; Weisz, D.; **Christensen, C.**; Freeman, K.; Gilbert, K.; Gallart, C.; Harris, J.; Hodge, P.; de Jong, R.; Karachentseva, V.; Mateo, M.; Stetson, P.; Tavares, M.; Zaritsky, D.; Governato, F.; Quinn, T.; 2009, *ApJS*, 183, 1, 67

**Selected Conference Proceedings & Abstracts** POSTER: COMPARING THE EFFECTS OF SUPERNOVAE FEEDBACK MODELS ON THE INTERSTELLAR MEDIUM  
Byrne, L.<sup>1</sup>; **Christensen, C.**; Keller, B.; 2017 *American Astronomical Society Meeting 229*, 347.53

TRACING THE ANGULAR DEPENDENCE OF THE CGM  
Nattinger, M.<sup>1</sup>; **Christensen, C.**; 2017 *American Astronomical Society Meeting 229*, 347.51

POSTER: METAL ENRICHMENT OF THE CGM THROUGH OUTFLOWS  
**Christensen, C.**; 2016 *American Astronomical Society Meeting 227*, 440.06

POSTER: SOURCE OF THE STELLAR AGE-VELOCITY DISPERSION RELATION IN SIMULATED GALAXIES  
Wills, A.<sup>1</sup>; **Christensen, C.**; 2016 *American Astronomical Society Meeting 227*, 342.12

POSTER: THE IMPACT OF FEEDBACK ON MERGER-DRIVEN BULGE GROWTH  
**Christensen, C.**; Brooks, A.; 2015 *American Astronomical Society Meeting 225*, 437.08

POSTER: EXAMINING THE DARK MATTER DISTRIBUTION OF A SIMULATED DWARF GALAXY UNDERGOING A MERGER  
Cates, I.<sup>1</sup>; **Christensen, C.**; 2014 *American Astronomical Society Meeting 223*, 246.48

POSTER: BARYON CYCLING IN COSMOLOGICAL SIMULATIONS OF SPIRAL GALAXIES  
**Christensen, C.**; Dave, R.; Pontzen, A.; Governato, F.; Quinn, T.; 2014 *American Astronomical Society Meeting 223*, 246.47

ORAL: COSMOLOGICAL SIMULATIONS: THE EFFECT OF ISM HEATING AND COOLING ON THE CENTRAL MASS DISTRIBUTION OF SPIRAL GALAXIES  
**Christensen, C.**, *American Astronomical Society Meeting 219*, January 2012

DISSERTATION TALK: MOLECULAR HYDROGEN IN COSMOLOGICAL SIMULATIONS OF GALAXIES  
**Christensen, C.**, Quinn, T., Governato, F., *American Astronomical Society Meeting 217*, January 2011

POSTER: MAGNETIC FIELDS OF YOUNG STARS IN NGC 752  
**Christensen, C.**, Simon, T., 2004 *American Astronomical Society Meeting 205*, 13.05

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<sup>1</sup>Undergraduate research student