Susan E. Clark Curriculum Vitae

1411 Pupin Hall 550 West 120th Street New York, New York 10027 seclark@astro.columbia.edu

Education	Columbia University New York, NY Ph.D. Candidate, Astronomy & Astrophysics Thesis Project: Magnetic Fields in the Interstellar Medium Thesis Advisors: Mary E. Putman, Joshua E.G. Peek	Oct. 2014 – present
	Columbia University New York, NY M.A., Astronomy & Astrophysics	Aug. 2012 – Oct. 2014
	University of North Carolina, Chapel Hill Chapel Hill, NC B.S., Physics	Aug. 2008 – May 2012
	Thomas Jefferson HS for Science & Technology Alexandria, VA	Sep. 2004 – June 2008
Honors and Awards	NSF Graduate Fellowship Columbia University	2012 – present
	Columbia Dean's Fellowship Columbia University	2012 - present
	Morehead-Cain Scholarship UNC-Chapel Hill	2008 - 2012
Teaching	GRADER Columbia University, Life in the Universe	Fall 2014
	Instructor Columbia University, Observational Astronomy Lab	Spring 2014
	Instructor Columbia University, Earth, Moon, & Planets Lab	Fall 2013
	GRADER Columbia University, Life in the Universe	Fall 2013
	Graduate Teaching Assistant Columbia University, Galaxies & Cosmology	Spring 2013

GRADUATE TEACHING ASSISTANT Columbia University, Stars & Atoms

Fall 2012

UNC-Chapel Hill, Physics Help Center

Spring 2011 – Spring 2012

Undergraduate Teaching Assistant

Fall 2011

UNC-Chapel Hill, Calculus-Based Newtonian Mechanics

Outreach and Service GRADUATE STUDENT INSTRUCTOR

Fall 2012 -

Columbia University Rooftop Variables: A partnership with NYC high school teachers to provide classroom instruction and conduct research-quality observations with students.

OUTREACH VOLUNTEER

Fall 2012 -

Columbia University Astronomy Outreach

FOUNDER, PRESIDENT

Fall 2010 – Spring 2012

UNC-Chapel Hill Women in Physics

MEMBER, SOCIAL CHAIR

Fall 2010 – Spring 2012

UNC-Chapel Hill Society of Physics Students

Students Advised Lowell E. Schudel: Undergraduate research, Summer 2014 & Summer 2015

Invited Talks

PRINCETON PLASMA PHYSICS LABORATORY THEORY SEMINAR

Dec. 2014

The Saturation of the Magnetorotational Instability via Weakly Nonlinear Analysis

Princeton, NJ

NON-IDEAL MHD, STABILITY, AND DISSIPATION IN PPDs

Aug. 2014

Exploring MRI Saturation via Weakly Nonlinear Analysis

Copenhagen, Denmark

Contributed

Talk, IAU Focus Meeting 5, The Legacy of Planck

August 2015

Talks Measuring B-mode Polarization Foregrounds with Neutral Hydrogen and Honolulu, Hawai'i

Posters

POSTER, IAU SYMPOSIUM 315

August 2015

Magnetically Aligned H_I and Dust: Measuring the Physical Properties of H_I Fibers

Honolulu, Hawai'i

TALK, PONTIFICA UNIVERSIDAD CATOLICA

May 2015

Measuring B-mode Polarization Foregrounds with Neutral Hydrogen

Santiago, Chile

Talk, Midwest Magnetic Fields Workshop

May 2015

Magnetically Aligned H_I and Dust in the ISM

Madison, WI

Oct. 2014 POSTER, NSF DIRECTORATE FOR MATHEMATICAL & PHYSICAL SCIENCES Magnetically Aligned H_I Fibers New York, NY POSTER, FILAMENTARY STRUCTURE IN MOLECULAR CLOUDS Oct. 2014 Quantifying Linear Structure with the Rolling Hough Transform, and Introducing the dRHT NRAO, Charlottesville, VA POSTER, GALACTIC SCIENCE WITH THE SKA AND ITS PATHFINDERS May 2014 Magnetically Aligned H_I Fibers Leiden, Netherlands Talk, Midwest Magnetic Fields Workshop **April** 2014 Magnetically Aligned HI Fibers Madison, WI Talk, Columbia University Pizza Lunch Feb. 2014 Quantifying Linear Structure in the ISM New York, NY Talk, Phases of the ISM Conference July 2013 Magnetized H_I Fibers and the Rolling Hough Transform Heidelberg, Germany TALK, SENIOR RESEARCH PRESENTATION April 2012 The Disruption of High-Velocity Clouds in the Milky Way Chapel Hill, NC POSTER, AAS WINTER MEETING Jan. 2012 Dust-to-Gas Comparisons with GALFA-HI Austin, TX

TALK, GALFA-HI MEETING

Aug. 2012

Aug. 2011

Gas/Dust Comparisons Using GALFA-HI Data Madison, WI

Talk, Arecibo REU Dust and Gas in the Interstellar Medium

Arecibo Observatory, PR

Publications Galactic and Magellanic Evolution with the SKA

h=3

McClure-Griffiths, N. M., Stanimirović, S., [5 authors], Clark, S. E., [3 authors], 2015,

from "Advancing Astrophysics with the Square Kilometre Array", PoS

MAGNETIZED HI FIBERS AND THE ROLLING HOUGH TRANSFORM Clark, S. E., Peek, J. E. G., Putman, M. 2014, ApJ, 789, 82

Physical Properties of Complex C Halo Clouds

Hsu, W-H, Putman, M. E., Heitsch, F., Stanimirović, S., Peek, J. E. G., Clark, S. E.,