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, 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., 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	2008 - 2012

h=3

Publications Neutral hydrogen structures trace dust polarization angle: Implications FOR THE INTERSTELLAR MEDIUM AND CMB FOREGROUNDS

> Clark, S.E., Hill, J. Colin, Peek, J.E.G., Putman, M.E., Babler, B.L., 2015, Submitted to PRL

> GALACTIC AND MAGELLANIC EVOLUTION WITH THE SKA 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.E. 2014, ApJ, 789, 82

Merit-based full scholarship to UNC-Chapel Hill

Physical Properties of Complex C Halo Clouds

Hsu, W-H, Putman, M.E., Heitsch, F., Stanimirović, S., Peek, J.E.G., Clark, S.E., 2010,

AJ, 141, 57

Teaching Head TA Fall 2015 – present

Columbia University Department of Astronomy

Grader Fall 2014

Columbia University, Life in the Universe

Instructor Spring 2014

Columbia University, Observational Astronomy Lab

Instructor Fall 2013

Columbia University, Earth, Moon, & Planets Lab

Grader Fall 2013

Columbia University, Life in the Universe

Graduate Teaching Assistant Spring 2013

Columbia University, Galaxies & Cosmology

Graduate Teaching Assistant Fall 2012

Columbia University, Stars & Atoms

Undergraduate Student Instructor Spring 2011 – Spring 2012

UNC-Chapel Hill, Physics Help Center

Undergraduate Teaching Assistant Fall 2011

UNC-Chapel Hill, Calculus-Based Newtonian Mechanics

Outreach Graduate Student Instructor Fall 2012 –

and Service

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

Invited PRINCETON PLASMA PHYSICS LABORATORY THEORY SEMINAR Dec. 2014 **Talks** 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 Honolulu, Hawai'i and 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 POSTER, NSF DIRECTORATE FOR MATHEMATICAL & PHYSICAL SCIENCES Oct. 2014 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 H_I Fibers Madison, WI Feb. 2014 Talk, Columbia University Pizza Lunch Quantifying Linear Structure in the ISM New York, NY Talk, Phases of the ISM Conference July 2013 Magnetized HI 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
Dust-to-Gas Comparisons with GALFA-Hi
Austin, TX

Talk, GALFA-Hi Meeting
Gas/Dust Comparisons Using GALFA-Hi Data
Madison, WI

Talk, Arecibo Reu
Dust and Gas in the Interstellar Medium

Arecibo Observatory, PR