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

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Invited Talks	IAS, ENS, AND CEA/SACLAY JOINT ISM SEMINAR Magnetically Aligned HI and <i>Planck</i> Polarized Dust Orsay, France	Oct.	2015
	PRINCETON PLASMA PHYSICS LABORATORY THEORY SEMINAR Dec. 2015. The Saturation of the Magnetorotational Instability via Weakly Nonlinear Analysis Princeton, New Jersey		2014
	Non-Ideal MHD, Stability, and Dissipation in PPDs Exploring MRI Saturation via Weakly Nonlinear Analysis Copenhagen, Denmark	Aug.	2014
Contributed Talks and Posters	Talk, Institut de Recherche en Astrophysique et Planétologie Measuring B-mode Polarization Foregrounds with Neutral Hydrogen Toulouse, France	Oct.	2015
	Talk, Magnetic Fields in the Universe V Measuring B-mode Polarization Foregrounds with Neutral Hydrogen Corsica, France	Oct.	2015
	Talk, IAU Focus Meeting 5, The Legacy of Planck Measuring B-mode Polarization Foregrounds with Neutral Hydrogen Honolulu, Hawai'i	Aug.	2015
	Poster, IAU Symposium 315 Aug. 201 Magnetically Aligned Hi and Dust: Measuring the Physical Properties of Hi Fibers Honolulu, Hawai'i		
	Talk, Pontifica Universidad Catolica Measuring B-mode Polarization Foregrounds with Neutral Hydrogen Santiago, Chile	May	2015
	Talk, Midwest Magnetic Fields Workshop Magnetically Aligned Hi and Dust in the ISM Madison, Wisconsin	May	2015
	POSTER, NSF DIRECTORATE FOR MATHEMATICAL & PHYSICAL SCIENCES Magnetically Aligned Hi Fibers New York, New York	Oct.	2014
	POSTER, FILAMENTARY STRUCTURE IN MOLECULAR CLOUDS Quantifying Linear Structure with the Rolling Hough Transform, and Introducing NRAO, Charlottesville, Virginia		2014 RHT
	POSTER, GALACTIC SCIENCE WITH THE SKA AND ITS PATHFINDERS Magnetically Aligned HI Fibers Leiden, Netherlands	May	2014
	Talk, Midwest Magnetic Fields Workshop Magnetically Aligned Hi Fibers Madison, Wisconsin	April	2014

Talk, Columbia University Pizza Lunch Quantifying Linear Structure in the ISM New York, New York	Feb. 2014
Talk, Phases of the ISM Conference Magnetized Hi Fibers and the Rolling Hough Transform Heidelberg, Germany	July 2013
Talk, Senior Research Presentation The Disruption of High-Velocity Clouds in the Milky Way Chapel Hill, North Carolina	April 2012
Poster, AAS Winter Meeting Dust-to-Gas Comparisons with GALFA-Hi Austin, Texas	Jan. 2012
Talk, GALFA-Hi Meeting Gas/Dust Comparisons Using GALFA-Hi Data Madison, Wisconsin	Aug. 2012
Talk, Arecibo REU Dust and Gas in the Interstellar Medium Arecibo Observatory, Puerto Rico	Aug. 2011