

SUSAN E. CLARK  
*Curriculum Vitae*

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

<b>Education</b>	COLUMBIA UNIVERSITY New York, NY Ph.D. Candidate, Astrophysics Thesis Project: <i>Magnetic Fields in the Interstellar Medium</i> Thesis Advisors: Mary E. Putman, Joshua E.G. Peek	Oct. 2014 – present
	COLUMBIA UNIVERSITY New York, NY M.A., M.Phil., 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
<b>Honors and Awards</b>	NSF GRADUATE FELLOWSHIP Columbia University	2012 – present
	COLUMBIA DEAN’S FELLOWSHIP Columbia University	2012 – present
	MOREHEAD-CAIN SCHOLARSHIP Merit-based full scholarship to UNC-Chapel Hill	2008 – 2012
<b>Publications</b> <i>h=3</i>	<i>Neutral hydrogen structures trace dust polarization angle: Implications for cosmic microwave background foregrounds.</i>	
	<b>Clark, S.E.</b> , 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], <b>Clark, S.E.</b> , [3 authors], 2015, from “Advancing Astrophysics with the Square Kilometre Array”, PoS	
	MAGNETIZED HI FIBERS AND THE ROLLING HOUGH TRANSFORM <b>Clark, S. E.</b> , Peek, J.E.G., Putman, M.E. 2014, <i>ApJ</i> , 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.**, 2010, *AJ*, 141, 57

<b>Teaching</b>	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	
<b>Outreach and Service</b>	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	
<b>Students Advised</b>	UNDERGRADUATE TEACHING ASSISTANT	Fall 2011
	UNC-Chapel Hill, Calculus-Based Newtonian Mechanics	
	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	
<b>Students Advised</b>	MEMBER, SOCIAL CHAIR	Fall 2010 – Spring 2012
	UNC-Chapel Hill Society of Physics Students	
<b>Students Advised</b>	Lowell E. Schudel: Undergraduate research, Summer 2014 & Summer 2015	

<b>Invited Talks</b>	BROWN ASTROPHYSICS SEMINAR Measuring B-mode Polarization Foregrounds with Neutral Hydrogen Providence, Rhode Island	Nov. 2015
	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 The Saturation of the Magnetorotational Instability via Weakly Nonlinear Analysis Princeton, New Jersey	Dec. 2014
	NON-IDEAL MHD, STABILITY, AND DISSIPATION IN PPDs Exploring MRI Saturation via Weakly Nonlinear Analysis Copenhagen, Denmark	Aug. 2014
<b>Contributed Talks and Posters</b>	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 Magnetically Aligned HI and Dust: Measuring the Physical Properties of HI Fibers Honolulu, Hawai'i	Aug. 2015
	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 the dRHT NRAO, Charlottesville, Virginia	Oct. 2014
	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

**Other  
Published  
Work**

*Closing My Eyes*, **S. E. Clark**, personal essay, The Washington Post Magazine, May 2009