## Susan E. Clark Curriculum Vitae

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Education	Columbia University 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 M.A., M.Phil., Astrophysics	Aug. 2012 – Oct. 2014
	University of North Carolina, Chapel Hill B.S., Physics	Aug. 2008 – May 2012
	Thomas Jefferson HS for Science & Technology	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 Merit-based full scholarship to UNC-Chapel Hill	2008 - 2012

## Publications h=3

S.E. Clark, J. Colin Hill, J.E.G. Peek, M.E. Putman, B.L. Babler. Neutral hydrogen structures trace dust polarization angle: Implications for cosmic microwave background foregrounds. 2015, Submitted to PRL. arXiv:1508.07705

N.M. McClure-Griffiths, S. Stanimirović, [5 authors], **S.E. Clark**, [3 authors]. *Galactic and Magellanic Evolution with the SKA*. 2015, from "Advancing Astrophysics with the Square Kilometre Array", PoS

S.E. Clark, J.E.G. Peek, M.E. Putman Magnetized Hi Fibers and the Rolling Hough Transform. 2014, ApJ, 789, 82

W.-H. Hsu, M.E. Putman, F. Heitsch, S. Stanimirović, J.E.G. Peek, S.E. Clark. *Physical Properties of Complex C Halo Clouds*. 2010, AJ, 141, 57

2 Curriculum Vitae, S. E. Clark **Teaching** Head TA Fall 2015 – present Columbia University Department of Astronomy Grader Fall 2014 Columbia University, Life in the Universe Spring 2014 Instructor Columbia University, Observational Astronomy Lab Fall 2013 Instructor Columbia University, Earth, Moon, & Planets Lab 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 Fall 2012 -Graduate Student Instructor and Columbia University Rooftop Variables: A partnership with NYC high school teachers to Service 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 Nov. 2015 Brown Astrophysics Seminar

**Talks** 

Measuring B-mode Polarization Foregrounds with Neutral Hydrogen

Providence, Rhode Island

IAS, ENS, and CEA/Saclay Joint ISM Seminar

Oct. 2015

Magnetically Aligned HI and Planck Polarized Dust

Orsay, France

Contributed

Talks and Posters

itae, S. E. Clark	3
Princeton Plasma Physics Laboratory Theory Semi The Saturation of the Magnetorotational Instability Princeton, New Jersey	
Non-Ideal MHD, Stability, and Dissipation in PPDs Exploring MRI Saturation via Weakly Nonlinear A Copenhagen, Denmark	
Talk, Institut de Recherche en Astrophysique et Pla Measuring B-mode Polarization Foregrounds with I Toulouse, France	9
Talk, Magnetic Fields in the Universe V Measuring B-mode Polarization Foregrounds with I Corsica, France	Oct. 2015 Neutral Hydrogen
Talk, IAU Focus Meeting 5, The Legacy of Planck Measuring B-mode Polarization Foregrounds with I Honolulu, Hawai'i	Aug. 2015 Neutral Hydrogen
Poster, IAU Symposium 315 Magnetically Aligned HI and Dust: Measuring the Honolulu, Hawai'i	Aug. 2015 Physical Properties of H <sub>I</sub> Fibers
Talk, Pontifica Universidad Catolica Measuring B-mode Polarization Foregrounds with I Santiago, Chile	May 2015 Neutral Hydrogen
Talk, Midwest Magnetic Fields Workshop Magnetically Aligned HI and Dust in the ISM Madison, Wisconsin	May 2015
Poster, NSF Directorate for Mathematical & Physic Magnetically Aligned HI Fibers New York, New York	cal Sciences Oct. 2014
Poster, Filamentary Structure in Molecular Clouds Quantifying Linear Structure with the Rolling Houg NRAO, Charlottesville, Virginia	Oct. 2014 h Transform, and Introducing the dRHT
Poster, Galactic Science with the SKA and its Path Magnetically Aligned H <sub>I</sub> Fibers Leiden, Netherlands	nfinders 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-Hı Meeting Gas/Dust Comparisons Using GALFA-Hı 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