

SUSAN E. CLARK
Curriculum Vitae

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

- | | |
|----------------------------------|---|
| Education | <p>Columbia University Oct. 2014 – present
Ph.D. Candidate, Astrophysics
Thesis Project: <i>Magnetic Fields in the Interstellar Medium</i>
Thesis Advisors: Mary E. Putman, Joshua E.G. Peek</p> <p>Columbia University Aug. 2012 – Oct. 2014
M.A., M.Phil., Astrophysics</p> <p>University of North Carolina, Chapel Hill Aug. 2008 – May 2012
B.S., Physics</p> <p>Thomas Jefferson HS for Science & Technology Sep. 2004 – June 2008</p> |
| Honors
and
Awards | <p>NSF Graduate Fellowship 2012 – present
Columbia University</p> <p>Columbia Dean’s Fellowship 2012 – present
Columbia University</p> <p>Morehead-Cain Scholarship 2008 – 2012
Merit-based full scholarship to UNC-Chapel Hill</p> |
| Publications | <p>S.E. Clark, J. Colin Hill, J.E.G. Peek, M.E. Putman, B.L. Babler. <i>Neutral hydrogen structures trace dust polarization angle: Implications for cosmic microwave background foregrounds</i>. 2015, Accepted to PRL. arXiv:1508.07705</p> <p>N.M. McClure-Griffiths, S. Stanimirović, [5 authors], S.E. Clark, [3 authors]. <i>Galactic and Magellanic Evolution with the SKA</i>. 2015, from “Advancing Astrophysics with the Square Kilometre Array”, PoS</p> <p>S.E. Clark, J.E.G. Peek, M.E. Putman <i>Magnetized H I Fibers and the Rolling Hough Transform</i>. 2014, ApJ, 789, 82</p> <p>W.-H. Hsu, M.E. Putman, F. Heitsch, S. Stanimirović, J.E.G. Peek, S.E. Clark. <i>Physical Properties of Complex C Halo Clouds</i>. 2010, AJ, 141, 57</p> |

Teaching	Head TA Columbia University Department of Astronomy	Fall 2015 – present
	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
	Undergraduate Student Instructor UNC-Chapel Hill, Physics Help Center	Spring 2011 – Spring 2012
	Undergraduate Teaching Assistant UNC-Chapel Hill, Calculus-Based Newtonian Mechanics	Fall 2011
Outreach and Service	Graduate Student Instructor Columbia University Rooftop Variables: A partnership with NYC high school teachers to provide classroom instruction and conduct research-quality observations with students.	Fall 2012 –
	Outreach Volunteer Columbia University Astronomy Outreach	Fall 2012 –
	Founder, President UNC-Chapel Hill Women in Physics	Fall 2010 – Spring 2012
	Member, Social Chair UNC-Chapel Hill Society of Physics Students	Fall 2010 – Spring 2012
Students Advised	Lowell E. Schudel: Undergraduate research, Summer 2014 & Summer 2015	
Invited Talks	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
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 Magnetically Aligned H I and Dust: Measuring the Physical Properties of H I 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 H I and Dust in the ISM Madison, Wisconsin	May 2015
	Poster, NSF Directorate for Mathematical & Physical Sciences Magnetically Aligned H I 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 H I Fibers Leiden, Netherlands	May 2014
	Talk, Midwest Magnetic Fields Workshop Magnetically Aligned H I 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