Susan E. Clark

Curriculum Vitae

Physics Department
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Stanford, CA 94305

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APPOINTMENTS

Assistant Professor, Stanford University Department of Physics	2021 – present
Member, Institute for Advanced Study	2017 – 2021
NASA Hubble Fellow, Institute for Advanced Study	2017 – 2020

EDUCATION

Columbia University

Ph.D., Astrophysics — 2017

Dissertation: *Magnetic Fields in the Interstellar Medium*

M.A., M.Phil, Astrophysics — 2014

The University of North Carolina at Chapel Hill

B.S., Physics — 2012

HONORS & AWARDS

Terman Faculty Fellow, Stanford University	2021
Hubble Fellowship	2017 - 2020
Institute for Advanced Study School of Natural Sciences Fellowship	2020 - 2022
Unsung Hero Award, Princeton Prison Teaching Initiative	2019
ASNY Graduate Student Paper Prize	2016
CCAPP Price Prize in Cosmology and AstroParticle Physics	2016
PRL Editors' Recommendation Paper	2015
NSF Graduate Research Fellowship	2012 – 2017
Columbia Dean's Fellowship	2012 – 2017
Morehead-Cain Scholarship	2008 – 2012

Full scholarship to UNC-Chapel Hill

PUBLICATIONS

Complete ADS record

First- and single-author refereed journal articles

8. **S.E. Clark**, Chang-Goo Kim, J. Colin Hill, B.S. Hensley. *The Origin of Parity Violation in Polarized Dust Emission and Implications for Cosmic Birefringence.* 2021, ApJ 919, 53. arXiv:2105.00120

7. **S.E. Clark** & B.S. Hensley. *Mapping the Magnetic Interstellar Medium in Three Dimensions Over the Full Sky with Neutral Hydrogen.* 2019, ApJ 887, 2. arXiv:1909.11673

6. **S.E. Clark**, J.E.G. Peek, M.-A. Miville-Deschênes. *The physical nature of neutral hydrogen intensity structure.* 2019, ApJ 874, 171. arXiv:1902.01409

5. **S.E. Clark**. *A new probe of line-of-sight magnetic field tangling.* 2018, ApJL 857, L10. arXiv:1802.00011

4. **S.E. Clark** & J.S. Oishi. *The weakly nonlinear magnetorotational instability in a global, cylindrical Taylor-Couette flow.* 2017, ApJ 841, 2. arXiv:1610.01603

3. **S.E. Clark** & J.S. Oishi. *The weakly nonlinear magnetorotational instability in a local geometry.* 2017, ApJ 841, 1. arXiv:1610.01616

2. **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, PRL 115, 241302. Selected as PRL Editors' Recommendation. arXiv:1508.07705

1. **S.E. Clark**, J.E.G. Peek, M.E. Putman. *Magnetically aligned* HI *fibers and the Rolling Hough Transform.* 2014, ApJ 789, 82. arXiv:1312.1338

Other refereed journal articles [* = mentored student lead, underline = Clark group member]

42. R. Córdova Rosado*, B. Hensley, **S.E. Clark**, A. Duivenvoorden, et al. *The Atacama Cosmology Telescope: Galactic Dust Structure and the Cosmic PAH Background in Cross-correlation with WISE.* 2023, submitted to ApJ. arXiv:2307.06352

41. W.R. Coulton, M. Madhavacheril, A. Duivenvoorden, J.C. Hill, et al. incl. **S.E. Clark**. *The Atacama Cosmology Telescope: High-resolution component-separated maps across one-third of the sky.* 2023, submitted. arXiv:2307.01258

40. G. Halal*, **S.E. Clark**, A. Cukierman, D. Beck, C.-L. Kuo. *Filamentary Dust Polarization and the Morphology of Neutral Hydrogen Structures.* 2023, submitted to ApJ. arXiv:2306.10107

39. F. Qu et al. incl. **S.E. Clark**. *The Atacama Cosmology Telescope: A Measurement of the DR6 CMB Lensing Power Spectrum and its Implications for Structure Growth.* 2023, submitted to ApJ. arXiv:2304.05202

38. M. Madhavacheril et al. incl. **S.E. Clark**. *The Atacama Cosmology Telescope: DR6 Gravitational Lensing Map and Cosmological Parameters.* 2023, submitted to ApJ. arXiv:2304.05203

37. A. Borlaff, E. Lopez-Rodriguez, R. Beck, Rainer **S.E. Clark**, E. Ntormousi, et al. *Extragalactic magnetism with SOFIA (SALSA Legacy Program) – V: First results on the magnetic field orientation of galaxies.* 2023, ApJ 952, 4. arXiv:2303.13586

36. W. Surgent*, E. Lopez-Rodriguez, **S.E. Clark**. *The structure of magnetic fields in spiral galaxies: a radio and far-infrared polarimetric analysis.* 2023, in press at ApJ. arXiv:2302.07278

35. M. Lei* & **S.E. Clark**. *Probing the cold neutral medium through HI emission morphology with the scattering transform.* 2023, ApJ 947, 74. arXiv:2212.06182

34. J. Clancy, G. Puglisi, **S.E. Clark**, G. Coppi et al. *Polarization fraction of Planck Galactic cold clumps and forecasts for the Simons Observatory.* 2023, accepted to MNRAS. arXiv:2303.02788

33. U. Fuskeland et al. incl. **S.E. Clark**. *Tensor-to-scalar ratio forecasts for extended LiteBIRD frequency configurations.* 2023, submitted to A&A. arXiv:2302.05228

32. Y.K. Ma, N. McClure-Griffiths, **S.E. Clark**, S.J. Gibson, et al. *H I filaments as potential compass needles? Comparing the magnetic field structure of the Small Magellanic Cloud to the orientation of GASKAP-H I filaments.* 2023, MNRAS 521, 60. arXiv:2302.04880

31. BICEP/Keck Collaboration* incl. **S.E. Clark**. *BICEP / Keck XVI: Characterizing Dust Polarization Through Correlations with Neutral Hydrogen.* 2023, ApJ 945, 72. arXiv:2210.05684 *Led by George Halal*.*

30. E. Lopez-Rodriguez, A.S. Borlaff, R. Beck, et al. incl. S. Martin-Alvarez and **S.E. Clark**. *Extragalactic magnetism with SOFIA (SALSA Legacy Program). VI. The magnetic fields in the multiphase interstellar medium of the Antennae galaxies.* 2022, ApJ Letters, 942, 13. arXiv:2211.00012

29. A. Kim*, **S.E. Clark**, M. Putman, L. Li. *The Kinematic Structure of Magnetically Aligned HI Filaments.* 2022, submitted to MNRAS.

28. A. Cukierman, **S.E. Clark**, G. Halal. *Magnetic Misalignment of Interstellar Dust Filaments.* 2023, ApJ 946, 106. arXiv:2208.07382

27. E. Lopez-Rodriguez, S.A. Mao, R. Beck, et al. incl. **S.E. Clark**. *Extragalactic magnetism with SOFIA (SALSA Legacy Program) – IV: Program overview and first results on the polarization fraction.* 2022, ApJ 936, 92. arXiv:2205.01105

26. E. Lopez-Rodriguez, M. Clarke, S. Shenoy, et al. incl. **S.E. Clark**. *Extragalactic magnetism with SOFIA (SALSA Legacy Program) – III: First data release and on-the-fly polarization mapping characterization.* 2022, ApJ 936, 65. arXiv:2204.13611

25. B.S. Hensley, **S.E. Clark**, V. Fanfani, N. Krachmalnicoff, et al. *The Simons Observatory: Galactic Science Goals and Forecasts.* 2022, ApJ 929, 166. arXiv:2111.02425

24. I. Lowe et al. incl **S.E. Clark**. *A study of 90 GHz dust emissivity on molecular cloud and filament scales.* 2022, ApJ 929, 102. arXiv:2105.13432

23. A. Hacar, **S.E. Clark**, F. Heitsch, et al. *Initial Conditions for Star Formation: A Physical Description of the Filamentary ISM.* 2022, To appear in Protostars and Planets VII, Editors: Shu-ichiro Inutsuka, Yuri Aikawa, Takayuki Muto, Kengo Tomida, and Motohide Tamura. arXiv:2203.09562

22. J.L. Campbell*, **S.E. Clark**, B.M. Gaensler et al. *A Comparison of Multi-Phase Magnetic Field Tracers in a High-Galactic Latitude Region of the Filamentary Interstellar Medium.* 2022, ApJ 927, 49. arXiv:2112.03247

21. LiteBIRD Collaboration et al. incl. **S.E. Clark**. *Probing Cosmic Inflation with the LiteBIRD Cosmic Microwave Background Polarization Survey.* 2022, submitted to PTEP. arXiv:2202.02773

20. N. M. Pingel, J. Dempsey, N. M. McClure-Griffiths, et al. incl. **S.E. Clark**. *GASKAP-HI Pilot Survey Science I: ASKAP Zoom Observations of HI Emission in the Small Magellanic Cloud.* 2022, PASA 39, 5. arXiv:2111.05339

19. J.M. Dickey, J.M. Dempsey, N.M. Pingel, N.M. McClure-Griffiths, K. Jameson, J.R. Dawson, H. Dnes, **S.E. Clark**, D. Leahy, Min-Young Lee, M.-A. Miville-Deschênes, S. Stanimirović, C.D. Tremblay, J. Th. van Loon. *GASKAP Pilot Survey Science II: ASKAP Zoom Observations of Galactic 21-cm Absorption.* 2022, ApJ 926, 186. arXiv:2111.04545

18. S. Pearson, **S.E. Clark**, A.J. Demirjian, K.V. Johnston, M.K. Ness, T.K. Starkenburg, B.F. Williams, R.A. Ibata. *The Hough Stream Spotter: A new Method for Detecting Linear Structure in Resolved Stars and Application to the Stellar Halo of M31.* 2022, ApJ 926, 166. arXiv:2107.00017

17. G. Panopoulou, **S.E. Clark**, A. Hacar, F. Heitsch, J. Kainulainen, E. Ntormousi, D. Seifried, R. J. Smith. *The width of Herschel filaments varies with distance.* 2022, A&AL 657, 13. arXiv:2111.08125

16. CCAT-Prime collaboration incl. **S.E. Clark**, *CCAT-prime Collaboration: Science Goals and Forecasts with Prime-Cam on the Fred Young Submillimeter Telescope.* 2022, ApJ Supplements 264, 7. arXiv:2107.10364

15. E. Lopez-Rodriguez, R. Beck, **S.E. Clark**, A. Hughes, A. Borlaff, E. Ntormousi, L. Grosset, K. Tassis, J. Beckman, K. Subramanian, D. Dale, T. Díaz-Santos. *Extragalactic magnetism with*

SOFIA (Legacy Program) - II: The bimodal magnetic field in the starburst ring of NGC 1097. 2021, ApJ 923, 150. arXiv:2107.09063

14. A.S. Borlaff, E. Lopez-Rodriguez, R. Beck et al. incl. **S.E. Clark**. *Extragalactic Magnetism with SOFIA (Legacy Program) – I: The magnetic field in the multi-phase interstellar medium of M51.* 2021, ApJ 921, 128. arXiv:2105.09315

13. Yilun Guan*, **S.E. Clark**, B.S. Hensley, P.A. Gallardo, S. Naess, et al. *The Atacama Cosmology Telescope: Microwave Intensity and Polarization Maps of the Galactic Center.* 2021, ApJ 920, 6. arXiv:2105.05267

12. A.J.M. Thomson, T.L. Landecker, N. McClure-Griffiths et al. incl. **S.E. Clark**. *The Global Magneto-Ionic Medium Survey (GMIMS): The brightest polarized region in the Southern sky at 75 cm and its implications for Radio Loop II.* 2021, MNRAS 507, 3495. arXiv:2106.12595

11. J.S. Oishi, K.J. Burns, **S.E. Clark**, E.H. Anders, B.P. Brown, G.M. Vasil, D Lecoanet. *eigentools: A Python package for studying differential eigenvalue problems with an emphasis on robustness.* 2021, JOSS 6(62), 3079. JOSS

10. V. Pelgrims, **S.E. Clark**, B.S. Hensley, G. V. Panopoulou, V. Pavlidou, K. Tassis, H.K. Eriksen, I.K. Wehus. *Evidence for Line-of-Sight Frequency Decorrelation of Polarized Dust Emission in Planck Data.* 2021, A&A 647, A16. arXiv:2101.09291

9. Choi et al. incl. **S.E. Clark**. *The Atacama Cosmology Telescope: A Measurement of the Cosmic Microwave Background Power Spectra at 98 and 150 GHz.* 2020, JCAP 12, 45. arXiv:2007.07289

8. Aiola et al. incl. **S.E. Clark**. *The Atacama Cosmology Telescope: DR4 Maps and Cosmological Parameters.* 2020, JCAP 12, 47. arXiv:2007.07288

7. J.E.G. Peek & **S.E. Clark**. *Small-Scale HI Channel Map Structure is Cold: Evidence from Na* I *Absorption at High Galactic Latitudes.* 2019, ApJL 886, 1. arXiv:1909.09647

6. A.J.M. Thomson, T.L. Landecker, [11 authors], **S.E. Clark**, [2 authors]. *Through thick or thin: Multiple components of the magneto-ionic medium towards the nearby* HII *region Sharpless 2-27 revealed by Faraday tomography.* 2019, MNRAS 487, 4751. arXiv:1905.09285

5. J.E.G. Peek, B.L. Babler, Y. Zheng, **S.E. Clark**, K.A. Douglas, E.J. Korpela, M.E. Putman, S. Stanimirović, S.J. Gibson, C. Heiles. *The GALFA-HI Survey Data Release 2.* 2018, ApJS 234, 1. ADS

4. F. Heitsch, B. Bartell, **S.E. Clark**, J.E.G. Peek, D. Cheng, M.E. Putman. *Three-dimensional orientation of compact high velocity clouds.* 2016, MNRAS Letters 462, L46. arXiv:1606.06689

3. J. Malinen, L. Montier, J. Montillaud, M. Juvela, I. Ristorcelli, **S.E. Clark**, O. Berné, J.-Ph. Bernard, V.-M. Pelkonen, D.C. Collins. *Matching dust emission structures and magnetic field in high-latitude cloud L1642: comparing Herschel and Planck maps.* 2016, MNRAS 460, 1934. arXiv:1512.03775

2. 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. arXiv:1501.01130

1. W.-H. Hsu, M.E. Putman, F. Heitsch, S. Stanimirović, J.E.G. Peek, **S.E. Clark**. *Physical properties of Complex C halo clouds.* 2011, AJ 141, 57. arXiv:1011.0011

Conference proceedings

3. I. Lowe, G. Coppi, et al. incl. **S.E. Clark**. *The Balloon-borne Large Aperture Submillimeter Telescope Observatory.* 2020, in Proc. SPIE 11445, Ground-based and Airborne Telescopes VIII, 114457A. arXiv:2012.01376

2. **S.E. Clark**. *Galactic neutral hydrogen and the magnetic ISM foreground.* 2017, in Jelić & van der Hulst (Eds.) *Peering towards Cosmic Dawn*, Proceedings of the International Astronomical Union, Symposium No. 333, Dubrovnik, Croatia

1. **S.E. Clark**, J.E.G. Peek, J. Colin Hill, M.E. Putman. *Quantifying the magnetic alignment of* HI *and dust in the diffuse ISM.* 2016, in P. Jablonka, Ph. André, F. van der Tak (Eds.) *From Interstellar Clouds to Star-forming Galaxies: Universal Processes?* Proceedings of the International Astronomical Union Symposia and Colloquia, IAU 315, Honolulu, Hawaii

White papers, mission proposals, and Astronomer's Telegrams

12. J. J. Han et al. incl. **S.E. Clark**. *NANCY: Next-generation All-sky Near-infrared Community surveY.* arXiv:2306.11784

11. K. Abazajian et al. incl. **S.E. Clark**. *Snowmass 2021 CMB-S4 White Paper.* arXiv:2203.08024

10. C. Chang et al. incl **S.E. Clark**. *Snowmass2021 Cosmic Frontier: Cosmic Microwave Background Measurements White Paper.* arXiv:2203.07638

9. K. Alexander, N. Battalia, T. Bhandarkar, **S.E. Clark**. *GBT/MUSTANG-2 90 GHz Observations of AT2022cmc.* The Astronomer's Telegram, No. 15269. March 2022. ADS

8. A. Lee et al. incl. **S.E. Clark**. *The Simons Observatory.* 2019, Astro2020 Decadal APC White Paper. ADS

7. S. Hanany et al. incl. **S.E. Clark**. *PICO: Probe of Inflation and Cosmic Origins.* 2019, Astro2020 Decadal APC White Paper. arXiv:1908.07495

6. The Simons Observatory Collaboration, incl. **S.E. Clark**. *The Simons Observatory: Astro2020 Decadal Project Whitepaper.* 2019. arXiv:1907.08284

5. L. Fissel, C.L.H. Hull, **S.E. Clark**, D.T. Chuss et al. *Studying Magnetic Fields in Star Formation and the Turbulent Interstellar Medium.* 2019, Astro2020 Science White Paper. arXiv:1903.08757

4. **S.E. Clark**, C. Heiles, T. Robishaw. *Magnetic Fields and Polarization in the Diffuse Interstellar Medium.* 2019, Astro2020 Science White Paper. arXiv:1903.07671

3. D. Stinebring, S. Chatterjee, **S.E. Clark**., J.M. Cordes, T. Dolch, C. Heiles, [12 authors]. *Twelve Decades: Probing the ISM from kiloparsec to sub-AU scales.* 2019, Astro2020 Science White Paper. arXiv:1903.073701

2. B. Hensley et al. incl. **S.E. Clark**. *Determining the Composition of Interstellar Dust with Far-Infrared Polarimetry.* 2019, Astro2020 Science White Paper. ADS

1. S. Hanany et al. incl. **S.E. Clark**. *PICO: Probe of Inflation and Cosmic Origins.* 2019, Probe class mission study for NASA and 2020 Decadal Panel. arXiv:1902.10541

SCIENTIFIC PRESENTATIONS

Significant presentations since 2019. Career total: 103 presentations, including 75 invited talks/colloquia

Invited Conference Talks

50.	The Interstellar Institute: With Two Eyes	July 2022
49.	COSPAR 44th Scientific Assembly: Origins of Cosmic Rays	July 2022
48.	Our Galactic Ecosystem: Opportunities and Diagnostics in the Infrared and Beyond, Lake Arrowhead, California	Feb. 2022
47.	The Grand Cascade: The Evolution of Baryons Across Scales (*virtual*)	July 2021
46.	CMB-S4 Collaboration Meeting (*virtual*)	March 2021
45.	Arecibo Observatory Open House, AAS, Honolulu, Hawaii	Jan. 2020

44. *B*-Modes from Space, Garching, Germany — Dec. 2019
43. IEEE Workshop on Hyperspectral Image and Signal Processing, Amsterdam, The Netherlands — Sept. 2019
42. The Self-Organized Star Formation Process, Orsay, France — Sept. 2019
41. Pathways to the Future of Arecibo Observatory, San Juan, Puerto Rico — Feb. 2019

Invited Colloquia and Seminars

40. Colloquium, University of Arizona Theory Colloquium — April 2023
39. Canadian Institute for Theoretical Astrophysics (CITA) Seminar, Toronto, Canada — April 2023
38. Colloquium, Southern Methodist University — Dec. 2022
37. Cardiff Astro Seminar (*virtual*) — Dec. 2022
36. IAPS Seminar, Istituto Nazionale di Astrofisica, Rome (*virtual*) — Oct. 2022
35. Colloquium, University of Nevada Las Vegas (*virtual*) — April 2022
34. Seminar, DESY Zeuthen (*virtual*) — April 2022
33. Colloquium, University of Southern California (*virtual*) — Dec. 2021
32. Colloquium, SOFIA Observatory (*virtual*) — Nov. 2021
31. Colloquium, SLAC National Lab (*virtual*) — Nov. 2021
30. Colloquium, Oskar Klein Center, Stockholm University (*virtual*) — June 2021
29. Colloquium, Munich Joint Astronomy Colloquium (*virtual*) — April 2021
28. Colloquium, Johns Hopkins University (*virtual*) — April 2021
27. Colloquium, University of British Columbia (*virtual*) — March 2021
26. Tuesday Astrophysics Seminar, University of Chicago (*virtual*) — March 2021
25. Colloquium, Columbia University (*virtual*) — Feb. 2021
24. Colloquium, Stanford Physics & Applied Physics (*virtual*) — Oct. 2020
23. Colloquium, Caltech — March 2020
22. Colloquium, UC Santa Cruz — Feb. 2020
21. Colloquium, UC Berkeley — Feb. 2020
20. Colloquium, University of Toronto — Feb. 2020
19. Colloquium, UC Santa Barbara — Jan. 2020
18. Colloquium, Stanford University — Jan. 2020
17. Colloquium, University of Virginia/NRAO — Nov. 2019
16. Colloquium, Cornell University — Nov. 2019
15. McGill Space Institute Seminar, Montreal, Canada — Nov. 2019
14. Queen's University Seminar, Kingston, Canada — Nov. 2019
13. Colloquium, University of Maryland, College Park — Oct. 2019
12. CITA Seminar, Toronto, Canada — Oct. 2019
11. Princeton Gravity Group Seminar, Princeton, New Jersey — Feb. 2019

Contributed Talks

10. Scientific Frontiers for the DSA-2000 Radio Camera, Caltech, California — March 2023
9. CCAT-prime collaboration meeting *(virtual)* — April 2022
8. Modeling the Galactic Magnetic Field Conference *(virtual)* — Oct. 2021
7. IBEX Group Meeting *(virtual)* — Oct. 2021
6. Molecular Clouds, HII Regions, Interstellar Medium, AAS, Honolulu, Hawaii — Jan. 2020
5. Princeton/IAS Cosmology Lunch, Princeton, New Jersey — Oct. 2019
4. NASA Hubble Fellowship Program Symposium, Washington, D.C. — Oct. 2019
3. New Perspectives on Galactic Magnetism, Newcastle upon Tyne, England — June 2019

2. Hubble Fellows Symposium, Baltimore, Maryland — Mar. 2019
1. Big Apple Magnetic Fields, New York, New York — Jan. 2019

COURSES TAUGHT

Stanford University

Physics 15: Stars and Planets in a Habitable Universe — Winter 2023
Physics 367: Physics of the Interstellar and Intergalactic Medium — Spring 2022

Previously

Introduction to Astrophysics, Wagner Youth Correctional Facility — 2019
Introduction to Astrophysics, East Jersey State Prison — 2018

STUDENTS ADVISED

Graduate Students

Stanford

Minjie Lei, primary PhD advisor — 2022 – present
Marta Nowotka, primary PhD advisor — 2021 – present
George Halal, primary PhD advisor — 2020 – present

Stanford PhD rotation and Master's students

Tara Dacunha, PhD rotation student — 2022 – present
Viraj Manwadkar, PhD rotation student — 2022
Jack Dinsmore, PhD rotation student — 2022
Charles Yang, PhD rotation student — 2022
Iñigo Valenzuela Lombera, Applied Physics coterm student project — 2020 – 2021

Outside Stanford

Elizabeth Meador, Pittsburgh University, graduate student — 2021 – present
Rodrigo Córdova Rosado, Princeton University, graduate student — 2020 – present
Doyeon Avery Kim, Columbia University, graduate student — 2018 – present
Jessica Campbell, University of Toronto, graduate student — 2017 – 2022

Undergraduate Students

Stanford or Summer Research Programs at Stanford

2023

Tasmia Tabassum Arthi, Yujina Basnet, Khwaish Billore, Gisselle Jimenez, Diego Brandon Maglione, Anthony Nuñez, Will Surgent, Patrick Tupoumalohi, Mark Ting Hong Zhu

2022

Laywood Fayne, Francesca Fernandes, Eliza Gallagher, Monica Hicks, Israel Reyes, Abraar Saleem, Will Surgent, Gabriel Muñoz Zarazua, Kendall Zylstra

2021

Laywood Fayne, Sally Jiang

Outside Stanford

Alexis Demirjian, Barnard College, undergraduate research — 2019
Larry Li, Columbia University, undergraduate research — 2016 – 2019
Garrison Grogan, Columbia University, undergraduate research — 2016 – 2017
Lowell Schudel, Columbia University, undergraduate research — 2014 – 2015

PROFESSIONAL ACTIVITIES

Selected recent service to Stanford/KIPAC

Chair, Physics Department Recruiting & Outreach Committee	2022 – present
Physics Department Equity & Inclusion Committee	2021 – present
KIPAC Tea Committee	2021 – present
KIPAC Colloquium Committee	2021 – present
Co-Chair, KIPAC Equity & Inclusion Committee	2021 – present
IDEAL Pedagogy Physics team	2021

Selected recent service to the community

Simons Observatory Publications Panel (elected position)	2022 – present
Simons Observatory Theory & Analysis Committee (elected position)	2022 – present
CMB-S4 - LiteBIRD Memorandum of Understanding writing team	2022
Department of Energy Analysis of Alternatives for CMB-S4: served on Tiger Team	2022
Scientific Organizing Committee: *Galactic Science & CMB Foregrounds*, Tenerife, Spain (2022); *Interstellar Institute 6*, Orsay, France (2023); *Cosmology with CMB-S4*, SLAC (2023)	
CMB-S4 Collaboration Mentor	2021 – 2022
Board of Trustees, Association of Members of the Institute for Advanced Study	2020 – present
Referee, *ApJ*, *ApJL*, *A&A*, *Nature*, *Nature Astronomy*	
Reviewer/Panelist, NASA, NSF	

Collaboration leadership roles:

Project Scientist, Advanced Simons Observatory	2023 – present
Co-lead, Simons Observatory Galactic Science Working Group	2019–present
Founder and co-lead, Pan-Experiment Galactic Science Group	2020–present
Co-lead, Atacama Cosmology Telescope Galactic Science Working Group	2019–present
Deputy Lead, Magnetic Fields Science Working Group, CCAT-Prime collaboration	2020–present
Lead, Filaments Working Group, Galactic Australian SKA Pathfinder (GASKAP)	2020–2021

Active collaboration member:

Atacama Cosmology Telescope (ACT), BLAST, CCAT-Prime, CMB-S4, Galactic Australian SKA Pathfinder (GASKAP), Global Magneto-Ionic Medium Survey (GMIMS), LiteBIRD, PASIPHAE, Probe of Inflation and Cosmic Origins (PICO), Simons Observatory (SO)

SELECTED PUBLIC OUTREACH AND SERVICE

KIPAC Public Lecture (live-streamed on YouTube)	2022
Organizer, Speaker, Stanford Physics, Equity, and Identity Program	2021–2022
Professional Development Coordinator, SO-NSBP Summer Research Program	2020
Team Leader, Instructor, Prison Teaching Initiative	2018 – 2019
Public Talk, Astronomy on Tap, Trenton, New Jersey	2019
Invited Panelist, Conference for Undergraduate Women in Physics	2018
Volunteer, Reading Team Math Program, Harlem, New York	2016 – 2017
Instructor, Rooftop Variables, Curtis High School, Staten Island, New York	2012 – 2017
Outreach Volunteer, bi-weekly community stargazing, Columbia University	2012 – 2017
Public Lecture, *Our Magnetic Universe*, Columbia Astronomy Outreach Lecture Series	2015
Founder, President, Carolina Women in Physics	2010 – 2012

OTHER PUBLISHED WRITING

Interstellar Magnetism, **S.E. Clark**, article, The Institute Letter, Spring 2019
Closing My Eyes, **S.E. Clark**, personal essay, The Washington Post Magazine, May 2009