Stanford



Susan E. Clark

Assistant Professor of Physics

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor, Physics
- Member, Bio-X

ADMINISTRATIVE APPOINTMENTS

- Co-Director, Center for Decoding the Universe, Stanford Data Science, (2024- present)

HONORS AND AWARDS

- Helen B. Warner Prize, American Astronomical Society (2025)
- Chambers Fellow, Stanford University (2024 -- 2027)
- Sloan Research Fellow, Alfred P. Sloan Foundation (2024)
- Terman Fellow, Stanford University (2021)
- Hubble Fellow, NASA (2017 -- 2020)

PROFESSIONAL EDUCATION

- Ph.D., Columbia University , Astrophysics (2017)
- B.S., The University of North Carolina at Chapel Hill , Physics (2012)

LINKS

- Cosmic Magnetism & Interstellar Physics Group: https://clarkgroup.stanford.edu/

Teaching

COURSES

2025-26

- Computational Physics: PHYSICS 113 (Spr)
- Stars and Planets in a Habitable Universe: PHYSICS 15 (Aut)

2024-25

- Stars and Planets in a Habitable Universe: PHYSICS 15 (Aut)

2023-24

- Computational Physics: PHYSICS 113 (Spr)

- Stars and Planets in a Habitable Universe: PHYSICS 15 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Tara Dacunha, Boyang Ding, Jack Dinsmore, Viraj Manwadkar, Chloe Taylor

Postdoctoral Faculty Sponsor

Eric Moseley, Xiangyu Zhang

Doctoral Dissertation Advisor (AC)

Ben Dodge, Kaitlyn Karpovich, Minjie Lei, Marta Nowotka

Doctoral (Program)

Ben Dodge

Publications

PUBLICATIONS

- **Phase-dependent Magnetic Coherence in the Turbulent Interstellar Medium** *ASTROPHYSICAL JOURNAL*
  Butsky, I. S., Redshaw, C., Lei, M., Clark, S. E., Fielding, D. B.
  2026; 1011 (1)
- **The Neutral Atomic Hydrogen in the solar neighborhood (NeAtHood) project I. Ghost in the shell: Neutral atomic hydrogen in the extended Orion nebula** *ASTRONOMY & ASTROPHYSICS*
  Soler, J. D., Beuther, H., Glover, S. O., Klessen, R. S., Ott, J., Rugel, M., Teh, J. W., Clark, S. E., Goldsmith, P., Hacar, A., Socci, A., Heyer, M., Lee, et al
  2026; 711
- **Revealing the cold skeleton of the Magellanic clouds and the Magellanic Bridge with ASKAP** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Dempsey, J., McClure-Griffiths, N. M., Marchal, A., Clark, S. E., Dickey, J. M., Lee, M., Murray, C., Nguyen, H., Pingel, N. M., Stanimirovic, S., van Loon, J., Denes, H., Gibson, et al
  2026; 549 (1)
- **The radial component of the local Galactic magnetic field in 3D** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  McCallum, L., Frank, P., Hutschenreuter, S., Benjamin, R., Booth, R. A., Clark, S. E., Haverkorn, M., Hill, A. S., Mertsch, P., Ordog, A., Saydjari, A. K., West, J.
  2026; 548 (2)
- **Localized Deviations from the CO-Polycyclic Aromatic Hydrocarbon Relation in PHANGS-JWST Galaxies: Faint Polycyclic Aromatic Hydrocarbon Emission or Elevated CO Emissivity?** *ASTROPHYSICAL JOURNAL*
  Kim, J., Leroy, A. K., Sandstrom, K., Meidt, S. E., Teng, Y., Querejeta, M., Schinnerer, E., Clark, S. E., Chown, R., Glover, S. C. O., Dale, D. A., Baron, D., Sutter, et al
  2026; 1001 (1)
- **The Simons Observatory: forecasted constraints on primordial gravitational waves with the expanded array of Small Aperture Telescopes** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Abril-Cabezas, I., Adachi, S., Ade, P., Adler, A. E., Agrawal, P., Aguirre, J., Aiola, S., Alford, T., Ali, A., Alonso, D., Alvarez, M. A., An, R., Aravena, et al
  2026
- **A Catalog of Galactic Atomic Hydrogen Position-Position-Velocity Filaments** *ASTRONOMICAL JOURNAL*
  Putman, M. E., Kim, D. A., Clark, S. E., Li, L., Holm-Hansen, C., Peek, J. G.
  2026; 171 (2)
- **A Three-dimensional Model for the Reversal in the Local Large-scale Interstellar Magnetic Field** *ASTROPHYSICAL JOURNAL*
  Booth, R. A., Ordog, A., Brown, J., Landecker, T. L., Hill, A. S., West, J. L., Lei, M., Clark, S. E., Bracco, A., Dickey, J. M., Carretti, E.

2026; 997 (2)

- **The Pandora project - II. How non-thermal physics drives bursty star formation and temperate mass-loaded outflows in dwarf galaxies** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Martin-Alvarez, S., Sijacki, D., Haehnelt, M. G., Concas, A., Yuan, Y., Maiolino, R., Wechsler, R. H., Rodriguez montero, F., Farcy, M., Sanati, M., Dubois, Y., Rosdahl, J., Lopez-Rodriguez, et al
  2026; 545 (2)

- **The Atacama Cosmology Telescope: DR6 constraints on extended cosmological models** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Calabrese, E., Hill, J., Jense, H. T., La Posta, A., Abril-Cabezas, I., Addison, G. E., Ade, P. A. R., Aiola, S., Alford, T., Alonso, D., Amiri, M., An, R., Atkins, et al
  2025

- **The Simons Observatory: assessing the impact of dust complexity on the recovery of primordial B-mo des** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Liu, Y., Azzoni, S., Clark, S. E., Hensley, B. S., Vacher, L., Alonso, D., Baccigalupi, C., Brown, M. L., Carones, A., Chluba, J., Dunkley, J., Hervias-Caimapo, C., Johnson, et al
  2025

- **Neutral Gas Phase Distribution from H <sc>I</sc> Morphology: Phase Separation with Scattering Spectra and Variational Autoencoders** *ASTROPHYSICAL JOURNAL*
  Lei, M., Clark, S. E., Morel, R., Allys, E., Butsky, I. S., Redshaw, C., Fielding, D. B.
  2025; 993 (1)

- **The Atacama Cosmology Telescope: DR6 power spectra, likelihoods and ΛCDM parameters** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Louis, T., La Posta, A., Atkins, Z., Jense, H. T., Atacama Cosmology Telescope Collaboration
  2025

- **The Atacama Cosmology Telescope: DR6 maps** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Naess, S., Guan, Y., Duivenvoorden, A. J., Hasselfield, M., Wang, Y.
  2025

- **Joint Analysis of H <sc>I</sc> Absorption Zeeman Measurements and the Morphology of Filamentary H <sc>I</sc> Emission** *ASTROPHYSICAL JOURNAL*
  Nowotka, M., Clark, S. E., Burkhart, B., Fissel, L., Ching, T., Robishaw, T., Heiles, C.
  2025; 992 (1)

- **The Atacama Cosmology Telescope: DR6 power spectrum foreground model and validation** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Beringue, B., Surrao, K. M., Hill, J., Atkins, Z., Battaglia, N., Bolliet, B., Calabrese, E., Choi, S. K., Clark, S. E., Duivenvoorden, A. J., Dunkley, J., Giardiello, S., Goldstein, et al
  2025

- **Full-sky Models of Galactic Microwave Emission and Polarization at Subarcminute Scales for the Python Sky Model** *ASTROPHYSICAL JOURNAL*
  Borrill, J., Clark, S. E., Delabrouille, J., Frolov, A. V., Ghosh, S., Hensley, B. S., Hicks, M. D., Krachmalnicoff, N., Lau, K., Norton, M. M., Pryke, C., Puglisi, G., Remazeilles, et al
  2025; 991 (1)

- **The Simons Observatory: science goals and forecasts for the enhanced Large Aperture Telescope** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Abitbol, M., Abril-Cabezas, I., Adachi, S., Ade, P., Adler, A. E., Agrawal, P., Aguirre, J., Ahmed, Z., Aiola, S., Alford, T., Ali, A., Alonso, D., Alvarez, et al
  2025

- **PRIMA Vista: far-infrared polarimetry to unveil small-scale magnetohydrodynamics in extragalactic observations** *JOURNAL OF ASTRONOMICAL TELESCOPES INSTRUMENTS AND SYSTEMS*
  Maglione, D., Martin-Alvarez, S., Lopez-Rodriguez, E., Clark, S. E., Karpovich, K.
  2025; 11 (3)

- **The Atacama Cosmology Telescope: Systematic Transient Search of Single Observation Maps** *ASTROPHYSICAL JOURNAL*
  Biermann, E., Li, Y., Naess, S., Choi, S. K., Clark, S. E., Devlin, M., Dunkley, J., Gallardo, P. A., Guan, Y., Foster, A., Hasselfield, M., Hervias-Caimapo, C., Hilton, et al
  2025; 986 (1)

- **A Neutral Hydrogen Absorption Study of Cold Gas in the Outskirts of the Magellanic Clouds Using the GASKAP-H <sc>i</sc> Survey** *ASTRONOMICAL JOURNAL*
  Chen, H., Stanimirovic, S., Pingel, N. M., Dempsey, J., Buckland-Willis, F., Clark, S. E., Denes, H., Dickey, J. M., Gibson, S., Jameson, K., Kemp, I., Leahy, D., Lee, et al
  2025; 169 (5)

- **Modeling parity-violating spectra in Galactic dust polarization with filaments and its applications to cosmic birefringence searches** *PHYSICAL REVIEW D*
  Hervias-Caimapo, C., Cukierman, A. J., Diego-Palazuelos, P., Huffenberger, K. M., Clark, S. E.
  2025; 111 (8)

- **Faraday moments of the Southern Twenty-centimeter All-sky Polarization Survey (STAPS)** *ASTRONOMY & ASTROPHYSICS*
  Raycheva, N., Haverkorn, M., Ideguchi, S., Stil, J. M., Sun, X., Han, J. L., Carretti, E., Gao, X. Y., Bracco, A., Clark, S. E., Dickey, J. M., Gaensler, B. M., Hill, et al
  2025; 695

- **The Fallibility of Equipartition Magnetic Field Strengths from Synchrotron Emission Using Synthetically Observed Galaxies** *ASTROPHYSICAL JOURNAL*
  Dacunha, T., Martin-Alvarez, S., Clark, S. E., Lopez-Rodriguez, E.
  2025; 980 (2)

- **The magnetic field of the Radcliffe wave: Starlight polarization at the nearest approach to the Sun** *ASTRONOMY & ASTROPHYSICS*
  Panopoulou, G. V., Zucker, C., Clemens, D., Pelgrims, V., Soler, J. D., Clark, S. E., Alves, J., Goodman, A., Tjus, J.
  2025; 694

- **Emergence of high-mass stars in complex fiber networks (EMERGE) V. From filaments to spheroids: the origin of the hub-filament systems** *ASTRONOMY & ASTROPHYSICS*
  Hacar, A., Konietzka, R., Seifried, D., Clark, S. E., Socci, A., Bonanomi, F., Burkert, A., Schisano, E., Kainulainen, J., Smith, R.
  2025; 694

- **Local H <sc>i</sc> absorption towards the magellanic cloud foreground using ASKAP** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Nguyen, H., McClure-Griffiths, N. M., Dempsey, J., Dickey, J. M., Lee, M., Lynn, C., Murray, C. E., Stanimirovic, S., Busch, M. P., Clark, S. E., Dawson, J. R., Denes, H., Gibson, et al
  2024; 534 (4): 3478-3497

- **A New Constraint on the Relative Disorder of Magnetic Fields between Neutral Interstellar Medium Phases** *ASTROPHYSICAL JOURNAL*
  Lei, M., Clark, S. E.
  2024; 972 (1)

- **Imprints of the Local Bubble and Dust Complexity on Polarized Dust Emission** *ASTROPHYSICAL JOURNAL*
  Halal, G., Clark, S. E., Tahani, M.
  2024; 973 (1)

- **Extragalactic Magnetism with SOFIA (SALSA Legacy Program). VII. A Tomographic View of Far-infrared and Radio Polarimetric Observations through MHD Simulations of Galaxies** *ASTROPHYSICAL JOURNAL*
  Martin-Alvarez, S., Lopez-Rodriguez, E., Dacunha, T., Clark, S. E., Borlaff, A. S., Beck, R., Montero, F., Jung, S. L., Devriendt, J., Slyz, A., Roman-Duval, J., Ntormousi, E., Tahani, et al
  2024; 966 (1)

- **The first degree-scale starlight-polarization-based tomography map of the magnetized interstellar medium** *ASTRONOMY & ASTROPHYSICS*
  Pelgrims, V., Mandarakas, N., Skalidis, R., Tassis, K., Panopoulou, G. V., Pavlidou, V., Blinov, D., Kiehlmann, S., Clark, S. E., Hensley, B. S., Romanopoulos, S., Basyrov, A., Eriksen, et al
  2024; 684

- **Zero-polarization candidate regions for the calibration of wide-field optical polarimeters** *ASTRONOMY & ASTROPHYSICS*
  Mandarakas, N., Panopoulou, G. V., Pelgrims, V., Potter, S. B., Pavlidou, V., Ramaprakash, A., Tassis, K., Blinov, D., Kiehlmann, S., Koutsiona, E., Maharana, S., Romanopoulos, S., Skalidis, et al
  2024; 684

- **Atacama Cosmology Telescope: High-resolution component-separated maps across one third of the sky** *PHYSICAL REVIEW D*
  Coulton, W., Madhavacheril, M. S., Duivenvoorden, A. J., Hill, J., Abril-Cabezas, I., Ade, P. A. R., Aiola, S., Alford, T., Amiri, M., Amodeo, S., An, R., Atkins, Z., Austermann, et al
  2024; 109 (6)

- **The BLAST Observatory: A Sensitivity Study for Far-IR Balloon-borne Polarimeters** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF THE PACIFIC*
  Coppi, G., Dicker, S., Aguirre, J. E., Austermann, J. E., Beall, J. A., Clark, S. E., Cox, E. G., Devlin, M. J., Fissel, L. M., Galitzki, N., Hensley, B. S., Hubmayr, J., Molinari, et al
  2024; 136 (3)

- **On the evolution of the observed mass-to-length relationship for star-forming filaments** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Feng, J., Smith, R. J., Hacar, A., Clark, S. E., Seifried, D.
  2024; 528 (4): 6370-6387

- **The Atacama Cosmology Telescope: A Measurement of the DR6 CMB Lensing Power Spectrum and Its Implications for Structure Growth** *ASTROPHYSICAL JOURNAL*
  Qu, F., Sherwin, B. D., Madhavacheril, M. S., Han, D., Crowley, K. T., Abril-Cabezas, I., Ade, P. A. R., Aiola, S., Alford, T., Amiri, M., Amodeo, S., An, R., Atkins, et al
  2024; 962 (2)

- **The Atacama Cosmology Telescope: DR6 Gravitational Lensing Map and Cosmological Parameters** *ASTROPHYSICAL JOURNAL*
  Madhavacheril, M. S., Qu, F. J., Sherwin, B. D., Maccrann, N., Li, Y., Abril-Cabezas, I., Ade, P. A. R., Aiola, S., Alford, T., Amiri, M., Amodeo, S., An, R., Atkins, et al
  2024; 962 (2)

- **Filamentary Dust Polarization and the Morphology of Neutral Hydrogen Structures** *ASTROPHYSICAL JOURNAL*
  Halal, G., Clark, S. E., Cukierman, A., Beck, D., Kuo, C.
  2024; 961 (1)

- **The Atacama Cosmology Telescope: Galactic Dust Structure and the Cosmic PAH Background in Cross-correlation with WISE** *ASTROPHYSICAL JOURNAL*
  Rosado, R., Hensley, B. S., Clark, S. E., Duivenvoorden, A. J., Atkins, Z., Battistelli, E., Choi, S. K., Dunkley, J., Hervias-Caimapo, C., Li, Z., Louis, T., Naess, S., Page, et al
  2024; 960 (2)

- **The kinematic structure of magnetically aligned H i filaments** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Kim, D. A., Clark, S. E., Putman, M. E., Li, L.
  2023; 526 (3): 4345-4358

- **A new method for spatially resolving the turbulence-driving mixture in the ISM with application to the Small Magellanic Cloud** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Gerrard, I. A., Federrath, C., Pingel, N. M., McClure-Griffiths, N. M., Marchal, A., Joncas, G., Clark, S. E., Stanimirovic, S., Lee, M., van Loon, J., Dickey, J., Denes, H., Ma, et al
  2023; 526 (1): 982-999

- **The Structure of Magnetic Fields in Spiral Galaxies: A Radio and Far-infrared Polarimetric Analysis** *ASTROPHYSICAL JOURNAL*
  Surgent, W., Lopez-Rodriguez, E., Clark, S. E.
  2023; 954 (1)

- **Tensor-to-scalar ratio forecasts for extended LiteBIRD frequency configurations** *ASTRONOMY & ASTROPHYSICS*
  Fuskeland, U., Aumont, J., Aurlien, R., Baccigalupi, C., Banday, A. J., Eriksen, H. K., Errard, J., Genova-Santos, R. T., Hasebe, T., Hubmayr, J., Imada, H., Krachmalnicoff, N., Lamagna, et al
  2023; 676

- **Polarization fraction of Planck Galactic cold clumps and forecasts for the Simons Observatory** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Clancy, J., Puglisi, G., Clark, S. E., Coppi, G., Fabbian, G., Hervias-Caimapo, C., Hill, J. C., Nati, F., Reichardt, C. L.
  2023; 524 (3): 3712-3723

- **Extragalactic Magnetism with SOFIA (SALSA Legacy Program). V. First Results on the Magnetic Field Orientation of Galaxies** *ASTROPHYSICAL JOURNAL*
  Borlaff, A. S. S., Lopez-Rodriguez, E., Beck, R., Clark, S. E. E., Ntormousi, E., Tassis, K., Martin-Alvarez, S., Tahani, M., Dale, D. A. A., del Moral-Castro, I., Roman-Duval, J., Marcum, P. M. M., Beckman, et al
  2023; 952 (1)

- **Probing cosmic inflation with the LiteBIRD cosmic microwave background polarization survey** *PROGRESS OF THEORETICAL AND EXPERIMENTAL PHYSICS*
  Allys, E., Arnold, K., Aumont, J., Aurlien, R., Azzoni, S., Baccigalupi, C., Banday, A. J., Banerji, R., Barreiro, R. B., Bartolo, N., Bautista, L., Beck, D., Beckman, et al
  2023; 2023 (4)

- **Probing the Cold Neutral Medium through H I Emission Morphology with the Scattering Transform** *ASTROPHYSICAL JOURNAL*
  Lei, M., Clark, S. E.
  2023; 947 (2)

- **Magnetic Misalignment of Interstellar Dust Filaments** *ASTROPHYSICAL JOURNAL*
  Cukierman, A. J., Clark, S. E., Halal, G.
  2023; 946 (2)

- **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** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Ma, Y. K., McClure-Griffiths, N. M., Clark, S. E., Gibson, S. J., van Loon, J., Soler, J. D., Putman, M. E., Dickey, J. M., Lee, M., Jameson, K. E., Uscanga, L., Dempsey, J., Denes, et al
  2023; 521 (1): 60-83

- **BICEP/Keck. XVI. Characterizing Dust Polarization through Correlations with Neutral Hydrogen** *ASTROPHYSICAL JOURNAL*
  Ade, P. R., Ahmed, Z., Amiri, M., Barkats, D., Thakur, R., Bischoff, C. A., Beck, D., Bock, J. J., Boenish, H., Bullock, E., Buza, V., Cheshire, J. R., Clark, et al
  2023; 945 (1)

- **CCAT-prime Collaboration: Science Goals and Forecasts with Prime-Cam on the Fred Young Submillimeter Telescope** *ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES*
  Aravena, M. E., Austermann, J. E., Basu, K., Battaglia, N., Beringue, B., Bertoldi, F., Bigiel, F. C., Bond, J., Breysse, P. C., Broughton, C. C., Bustos, R., Chapman, S. C. K., Charmetant, et al
  2023; 264 (1)

- **Extragalactic Magnetism with SOFIA (SALSA Legacy Program): The Magnetic Fields in the Multiphase Interstellar Medium of the Antennae Galaxies*** *ASTROPHYSICAL JOURNAL LETTERS*
  Lopez-Rodriguez, E., Borlaff, A. S., Beck, R., Reach, W. T., Mao, S., Ntormousi, E., Tassis, K., Martin-Alvarez, S., Clark, S. E., Dale, D. A., del Moral-Castro, I.
  2023; 942 (1)

- **Optical Characterization of OMT-Coupled TES Bolometers for LiteBIRD** *JOURNAL OF LOW TEMPERATURE PHYSICS*
  Hubmayr, J., Ade, P. R., Adler, A., Allys, E., Alonso, D., Arnold, K., Auguste, D., Aumont, J., Aurlien, R., Austermann, J. E., Azzoni, S., Baccigalupi, C., Banday, et al
  2022

- **Extragalactic Magnetism with SOFIA (SALSA Legacy Program). III. First Data Release and On-the-fly Polarization Mapping Characterization*** *ASTROPHYSICAL JOURNAL*
  Lopez-Rodriguez, E., Clarke, M., Shenoy, S., Vacca, W., Coude, S., Arneson, R., Ashton, P., Eftekharzadeh, S., Beck, R., Beckman, J. E., Borlaff, A. S., Clark, S. E., Dale, et al
  2022; 936 (1)

- **Extragalactic Magnetism with SOFIA (SALSA Legacy Program). IV. Program Overview and First Results on the Polarization Fraction*** *ASTROPHYSICAL JOURNAL*

Lopez-Rodriguez, E., Mao, S., Beck, R., Borlaff, A. S., Ntormousi, E., Tassis, K., Dale, D. A., Roman-Duval, J., Subramanian, K., Martin-Alvarez, S., Marcum, P. M., Clark, S. E., Reach, et al

2022; 936 (1)

- **The width of Herschel filaments varies with distance** *ASTRONOMY & ASTROPHYSICS*

  Panopoulou, G., Clark, S. E., Hacar, A., Heitsch, F., Kainulainen, J., Ntormousi, E., Seifried, D., Smith, R. J.

  2022; 663

- **A Study of 90 GHz Dust Emissivity on Molecular Cloud and Filament Scales** *ASTROPHYSICAL JOURNAL*

  Lowe, I., Mason, B., Bhandarkar, T., Clark, S. E., Devlin, M., Dicker, S. R., Duff, S. M., Friesen, R., Hacar, A., Hensley, B., Mroczkowski, T., Naess, S., Romero, et al

  2022; 929 (1)

- **The Simons Observatory: Galactic Science Goals and Forecasts** *ASTROPHYSICAL JOURNAL*

  Hensley, B. S., Clark, S. E., Fanfani, V., Krachmalnicoff, N., Fabbian, G., Poletti, D., Puglisi, G., Coppi, G., Nibauer, J., Gerasimov, R., Galitzki, N., Choi, S. K., Ashton, et al

  2022; 929 (2)

- **A Comparison of Multiphase Magnetic Field Tracers in a High Galactic Latitude Region of the Filamentary Interstellar Medium** *ASTROPHYSICAL JOURNAL*

  Campbell, J. L., Clark, S. E., Gaensler, B. M., Marchal, A., Van Eck, C. L., Deshpande, A. A., George, S. J., Gibson, S. J., Ricci, R., Stil, J. M., Taylor, A. R.

  2022; 927 (1)

- **GASKAP-HI pilot survey science I: ASKAP zoom observations of Hi emission in the Small Magellanic Cloud** *PUBLICATIONS OF THE ASTRONOMICAL SOCIETY OF AUSTRALIA*

  Pingel, N. M., Dempsey, J., McClure-Griffiths, N. M., Dickey, J. M., Jameson, K. E., Arce, H., Anglada, G., Bland-Hawthorn, J., Breen, S. L., Buckland-Willis, F., Clark, S. E., Dawson, J. R., Denes, et al

  2022; 39

- **The Hough Stream Spotter: A New Method for Detecting Linear Structure in Resolved Stars and Application to the Stellar Halo of M31** *ASTROPHYSICAL JOURNAL*

  Pearson, S., Clark, S. E., Demirjian, A. J., Johnston, K., Ness, M. K., Starkenburg, T. K., Williams, B. F., Ibata, R. A.

  2022; 926 (2)

- **GASKAP Pilot Survey Science. II. ASKAP Zoom Observations of Galactic 21 cm Absorption** *ASTROPHYSICAL JOURNAL*

  Dickey, J. M., Dempsey, J. M., Pingel, N. M., McClure-Griffiths, N. M., Jameson, K., Dawson, J. R., Denes, H., Clark, S. E., Joncas, G., Leahy, D., Lee, M., Miville-Deschenes, M., Stanimirovic, et al

  2022; 926 (2)

- **The width of Herschel filaments varies with distance** *ASTRONOMY & ASTROPHYSICS*

  Panopoulou, G., Clark, S. E., Hacar, A., Heitsch, F., Kainulainen, J., Ntormousi, E., Seifried, D., Smith, R. J.

  2022; 657

- **Extragalactic Magnetism with SOFIA (Legacy Program)-II: A Magnetically Driven Flow in the Starburst Ring of NGC 1097*** *ASTROPHYSICAL JOURNAL*

  Lopez-Rodriguez, E., Beck, R., Clark, S. E., Hughes, A., Borlaff, A. S., Ntormousi, E., Grosset, L., Tassis, K., Beckman, J. E., Subramanian, K., Dale, D., Diaz-Santos, T.

  2021; 923 (2)

- **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** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*

  Thomson, A. J. M., Landecker, T. L., McClure-Griffiths, N. M., Dickey, J. M., Campbell, J. L., Carretti, E., Clark, S. E., Federrath, C., Gaensler, B. M., Han, J. L., Haverkorn, M., Hill, A. S., Mao, et al

  2021; 507 (3): 3495-3518

- **Extragalactic Magnetism with SOFIA (Legacy Program). I. The Magnetic Field in the Multiphase Interstellar Medium of M51*** *ASTROPHYSICAL JOURNAL*

  Borlaff, A. S., Lopez-Rodriguez, E., Beck, R., Stepanov, R., Ntormousi, E., Hughes, A., Tassis, K., Marcum, P. M., Grosset, L., Beckman, J. E., Proudfit, L., Clark, S. E., Diaz-Santos, et al

  2021; 921 (2)

- **The Atacama Cosmology Telescope: Microwave Intensity and Polarization Maps of the Galactic Center** *ASTROPHYSICAL JOURNAL*
  Guan, Y., Clark, S. E., Hensley, B. S., Gallardo, P. A., Naess, S., Duell, C. J., Aiola, S., Atkins, Z., Calabrese, E., Choi, S. K., Cothard, N. F., Devlin, M., Duivenvoorden, et al
  2021; 920 (1)
- **The Origin of Parity Violation in Polarized Dust Emission and Implications for Cosmic Birefringence** *ASTROPHYSICAL JOURNAL*
  Clark, S. E., Kim, C., Hill, J., Hensley, B. S.
  2021; 919 (1)
- **Evidence for line-of-sight frequency decorrelation of polarized dust emission in Planck data** *ASTRONOMY & ASTROPHYSICS*
  Pelgrims, Clark, S. E., Hensley, B. S., Panopoulou, G., Pavlidou, Tassis, K., Eriksen, H. K., Wehus, I. K.
  2021; 647
- **The Atacama Cosmology Telescope: a measurement of the Cosmic Microwave Background power spectra at 98 and 150 GHz** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Choi, S. K., Hasselfield, M., Ho, S., Koopman, B., Lungu, M., Abitbol, M. H., Addison, G. E., Ade, P. A. R., Aiola, S., Alonso, D., Amiri, M., Amodeo, S., Angile, et al
  2020
- **The Atacama Cosmology Telescope: DR4 maps and cosmological parameters** *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*
  Aiola, S., Calabrese, E., Maurin, L., Naess, S., Schmitt, B. L., Abitbol, M. H., Addison, G. E., Ade, P. A. R., Alonso, D., Amiri, M., Amodeo, S., Angile, E., Austermann, et al
  2020
- **Mapping the Magnetic Interstellar Medium in Three Dimensions over the Full Sky with Neutral Hydrogen** *ASTROPHYSICAL JOURNAL*
  Clark, S. E., Hensley, B. S.
  2019; 887 (2)
- **Small-scale H i Channel Map Structure Is Cold: Evidence from Na i Absorption at High Galactic Latitudes** *ASTROPHYSICAL JOURNAL LETTERS*
  Peek, J. G., Clark, S. E.
  2019; 886 (1)
- **Through thick or thin: multiple components of the magneto-ionic medium towards the nearby Hii region Sharpless 2-27 revealed by Faraday tomography** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Thomson, A. J. M., Landecker, T. L., Dickey, J. M., McClure-Griffiths, N. M., Wolleben, M., Carretti, E., Fletcher, A., Federrath, C., Hill, A. S., Mao, S. A., Gaensler, B. M., Haverkorn, M., Clark, et al
  2019; 487 (4): 4751-4767
- **The Physical Nature of Neutral Hydrogen Intensity Structure** *ASTROPHYSICAL JOURNAL*
  Clark, S. E., Peek, J. G., Miville-Deschenes, M.
  2019; 874 (2)
- **A New Probe of Line-of-sight Magnetic Field Tangling** *ASTROPHYSICAL JOURNAL LETTERS*
  Clark, S. E.
  2018; 857 (1)
- **Galactic neutral hydrogen and the magnetic ISM foreground**
  Clark, S. E.
  edited by Jelic, VanDerHulst, T.
  CAMBRIDGE UNIV PRESS.2018: 146-150
- **The GALFA-HI Survey Data Release 2** *ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES*
  Peek, J. G., Babler, B. L., Zheng, Y., Clark, S. E., Douglas, K. A., Korpela, E. J., Putman, M. E., Stanimirovic, S., Gibson, S. J., Heiles, C.
  2018; 234 (1)
- **The Weakly Nonlinear Magnetorotational Instability in a Local Geometry** *ASTROPHYSICAL JOURNAL*
  Clark, S. E., Oishi, J. S.
  2017; 841 (1)

- **The Weakly Nonlinear Magnetorotational Instability in a Global, Cylindrical Taylor-Couette Flow** *ASTROPHYSICAL JOURNAL*
  Clark, S. E., Oishi, J. S.
  2017; 841 (1)
- **Three-dimensional orientation of compact high velocity clouds** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Heitsch, F., Bartell, B., Clark, S. E., Peek, J. G., Cheng, D., Putman, M.
  2016; 462 (1): L46-L50
- **Matching dust emission structures and magnetic field in high-latitude cloud L1642: comparing Herschel and Planck maps** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Malinen, J., Montier, L., Montillaud, J., Juvela, M., Ristorcelli, I., Clark, S. E., Berne, O., Bernard, J., Pelkonen, V., Collins, D. C.
  2016; 460 (2): 1934-1945
- **Neutral Hydrogen Structures Trace Dust Polarization Angle: Implications for Cosmic Microwave Background Foregrounds** *PHYSICAL REVIEW LETTERS*
  Clark, S. E., Hill, J., Peek, J. G., Putman, M. E., Babler, B. L.
  2015; 115 (24): 241302
- **Quantifying the Magnetic Alignment of Hland Dust in the Diffuse ISM**
  Clark, S. E., Peek, J. G., Hill, J., Putman, M. E.
  edited by Jablonka, P., Andre, P., VanDerTak, F.
  CAMBRIDGE UNIV PRESS.2015
- **MAGNETICALLY ALIGNED HI FIBERS AND THE ROLLING HOUGH TRANSFORM** *ASTROPHYSICAL JOURNAL*
  Clark, S. E., Peek, J. G., Putman, M. E.
  2014; 789 (1)
- **PHYSICAL PROPERTIES OF COMPLEX C HALO CLOUDS** *ASTRONOMICAL JOURNAL*
  Hsu, W., Putman, M. E., Heitsch, F., Stanimirovic, S., Peek, J. G., Clark, S. E.
  2011; 141 (2)