

David Vincent Stark

Space Telescope Science Institute
3700 San Martin Dr
Baltimore MD, 21218, USA
<https://www.stsci.edu/dstark/>
<https://github.com/dvstark>
Email: dstark@stsci.edu

EDUCATION

University of North Carolina at Chapel Hill

Ph.D. in Physics, Advisor: Sheila Kannappan 2012–2015
– Thesis: “Drivers of Galaxy Fueling”

University of North Carolina at Chapel Hill

M.S. in Physics, Advisor: Sheila Kannappan 2008–2012
– Thesis: “Linking Galaxy Molecular-to-Atomic Gas Ratios to Transient Evolutionary States”

University of Maryland at College Park

B.S. Physics, B.S. in Astronomy with High Honors, Thesis Advisor: Stacy McGaugh 2004–2008
– Thesis: “A First Attempt to Calibrate the Baryonic Tully-Fisher Relation with Gas-Dominated Galaxies”

EMPLOYMENT

Space Telescope Science Institute

Senior Staff Scientist, Science Support, HST/ACS Team Oct 2024 –present

Staff Scientist II, Science Support, HST/ACS Team Feb 2022 –Oct 2024

- Hubble Space Telescope Advanced Camera for Surveys Instrument Team Member
- User support: answer help desk tickets, conduct technical proposal reviews, write technical reports, develop Jupyter-notebooks as tutorials
- ACS Instrument Handbook co-Editor (2023)/Lead Editor (2024)
- Major projects led: (1) Developed new Python algorithm to identify satellite trails in imaging data; led analysis of satellite trail contamination rate in ACS data. (2) Simulated the impact of imperfect CCD charge transfer efficiency on signal-to-noise and source detectability, (3) Analyzed calibration data to assess impact of imperfect CTE on extended sources.
- HST/JWST proposal review support
- Supervised INS intern project to understand glint artifact in ACS/WFC imaging
- Self-funded research on galaxy-evolution

Johns Hopkins University

Associate Research Scientist July 2023 –present

- Research on galaxy evolution (breakBRD galaxies, HI-MaNGA survey)

University of Washington

Research Scientist Oct 2021 –February 2022
40 hours/week

- Supervisor: Sarah Tuttle
- Led observations (using Green Bank Telescope) and analysis of gas content for the BreakBRD galaxy sample.
- Continued involvement in HI-MaNGA survey management.

Haverford College

Postdoctoral Research Fellow
40 hours/week

September 2019 –October 2021

- Supervisor: Karen L. Masters
- Oversaw HI-MaNGA observational data: managed automatic observing program, post-observing data inspection, data reduction pipeline, quality control, generation of final data products/catalogs
- Conducted research on topics related to galaxy evolution using MaNGA optical IFU and HI-MaNGA radio data sets.
- Supervised student projects.

Kavli IPMU, University of Tokyo

Postdoctoral Research Fellow
40 hours/week

September 2015 –August 2019

- Independent research on topics related to galaxy evolution, including galaxy gas content and environment, conditions for star formation, nature of distortions in galaxy velocity fields

University of North Carolina at Chapel Hill

Graduate Student/Research Assistant

September 2008 –August 2015

- Advisor: Sheila J. Kannappan
- M.S./PhD research on multiple topics relating to galaxy evolution: galaxy gas content and phase transformations, gas accretion, star formation, galaxy environments, high velocity clouds

University of Maryland at College Park

Undergraduate Honors Senior Thesis Research

September 2007 –August 2008

- Advisor: Stacy S. McGaugh
- Honors senior thesis research on the Baryonic Tully-Fisher Relation using gas-dominated galaxies.

University of Maryland at College Park

Undergraduate Research Assistant

October 2005 –August 2008

- Advisor: A. Surjalal Sharma
- Responsible for using computer models to simulate interactions between Earth's magnetosphere and the solar wind.

TEACHING EXPERIENCE

- **Visiting Assistant Professor** at Haverford College Spring 2021 –Fall 2021
Lead instructor for Classical and Modern Physics I and II (PHYS101 & PHYS102)
- **Substitute Instructor** at Haverford College Fall 2019 –Spring 2020
Led a few classes for “Astronomical Ideas” (ASTR101), “Advanced Electricity and Magnetism” (PHYS304), and “Introduction to Astrophysics” (ASTR204)
- **Lead Instructor** at UNC Chapel Hill Fall 2013
Stars, Galaxies, and Cosmology (ASTR102)
- **Teaching Assistant** at UNC Chapel Hill Spring 2012
Stars, Galaxies, and Cosmology (ASTR102)
- **Teaching Assistant** at UNC Chapel Hill Fall 2008 –Spring 2009
Introductory Astronomy Lab (ASTR101L)

RESEARCH INTERESTS

- Galaxy gas content: its role in galaxy evolution and external influences
- Atomic-to-molecular transition in galaxies
- Conditions for star formation
- Nature and origin of high velocity clouds
- General galaxy evolution
- Satellite trail & artifact detection

TECHNICAL SKILLS

- Telescope observing: GBT, Arecibo, ALMA, ARO 12m, SOAR, SALT, VLA, HST
- Python and IDL programming languages
- git/github
- Statistical data analysis
- Single-dish radio telescope data reduction (with GBTIDL/CLASS)
- Radio interferometric (ALMA/VLA) data reduction (with CASA)
- Optical/IR imaging and spectroscopic data reduction (with IRAF, Python)
- Multi-wavelength image analysis
- Multi-wavelength spectroscopic analysis
- Amazon Web Services (training ongoing)
- Machine Learning (training completed)

ADVISING/MENTORING

- **Genevieve Mehra**, Johns Hopkins University 2023-2024
Paper: Glint in ACS/WFC Imaging Data, ACS ISR 2024-05
- **Griffin Shapiro**, Middlebury College Summer 2021
Paper: Investigating Source Confusion in the HI-MaNGA Survey, 2022, RNAAS, 6, 1
- **Jacqueline Turner**, Haverford College Summer 2021
Studies of GPS L3 contamination in GBT L-band data, coadvised with Prof. K. Masters
- **Emily Frank**, Vassar College/KNAC Fellow Summer 2020 –present
Paper: The HI Content of Red Geyser Galaxies (senior thesis and publication in MNRAS, 2023, 519, 3312)
- **Julian Goddy**, Haverford College Summer 2020 –present
Papers: (1) L-band Calibration of the Green Bank Telescope from 2016–2019, 2020, RNAAS, 4, 3 (2) A Comparison of the Baryonic Tully-Fisher Relation in MaNGA and IllustrisTNG, senior thesis and publication in MNRAS, 2023, 320, 3859
- **Wilber Dominguez**, Swarthmore College/KNAC Fellow Summer 2020
Using simulations to understand the origin of HI spectral profile asymmetry
- **Anubhav Sharma**, Haverford College Fall 2019 –present
Co-advised with Prof. Karen Masters. Paper: HI-Rich but Low Star Formation Rate Galaxies in MaNGA, 2023, MNRAS, 526, 1573
- **Sean Dillon**, California State University, Chico/KNAC Fellow Summer 2019
Co-advised with Prof. Karen Masters, Using PCA to understand HI Gas Fractions
- **Patricia Fofie**, Smith College/KNAC Fellow Summer 2019
Co-advised with Prof. Karen Masters, Understanding HI asymmetries in HI-MaNGA data

- **Nattida Samanso**, Chulalongkorn University Spring 2018
Co-advised with Prof. Wiphu Rujopakarn, GBT Observing for the HI-MaNGA program
- **Jin Soo Lim**, Stanford University Summer 2016
Co-advised with Prof. Alexie Leauthaud
- **Katrina Litke**, University of Illinois Urbana-Champaign Summer 2013
Co-advised with Prof. Sheila Kannappan, Intrinsic shapes of galaxies in the RESOLVE survey
- **Ashley Baker**, UNC Chapel Hill Spring 2012 –2013
Co-advised with Prof. Sheila Kannappan. Paper: A search for star formation in the Smith Cloud, 2015, MNRAS, 446, 1855

GRANTS AND AWARDS

- **“Using resolved HI observations of breakBRDs to understand the onset of quenching”**, STScI DRF 2024
\$30,703 award
- **“Constraining the origin of breakBRD galaxies through gas content and properties”**, STScI DRF 2022
\$32,295 award
- **ALMA Ambassador Program**, NRAO 2020
\$10,000 award
- **Dissertation Completion Fellowship**, The Royster Society of Fellows 2014 –2015
\$20,000 stipend, \$2,000 research
- **Student Observing Support**, NRAO 2013
\$32,600
- **GAANN Fellowship**, GAANN 2010, 2012
\$12,944
- **Outstanding Graduate Teaching Award - Honorable Mention**, UNC Dept. of Physics and Astronomy 2012
Awarded for Spring 2012 ASTR102 class
- **Graduate Research Fellowships**, NC Space Grant 2010
\$7,000
- **“A Search for Star Formation in the Smith Cloud” (GI60041)**, NASA GALEX 2009
\$35,000
- **Grants In Aid of Research**, Sigma Xi 2009
\$5,000

SUCCESSFUL PI TELESCOPE PROPOSALS

- **HI-MaNGA: HI Followup for MaNGA Galaxies** 2024
Green Bank Telescope, 382 hours
- **Constraining the Evolution of BreakBRD Galaxies with VLA HI Mapping** 2023
Very Large Array, 43.5 hours
- **Understanding diverse HI depletion times in MaNGA star forming galaxies** 2022
Green Bank Telescope/ARGUS, 81 hours
- **HI-MaNGA: HI followup for MaNGA Galaxies** 2020-2021
Green Bank Telescope, 580 hours (Fall 2020), 309 hours (fall 2021)
- **Exploratory Observations of CO(1-0) 115.271 GHz Emission in MaNGA Galaxies** 2019
Green Bank Telescope, Director’s Discretionary Time, 4.3 hours
- **Searching for the Emergence of Conformity in Nascent Groups** 2016

- ALMA, 14.6 hours*
- **Tracking Gas Accretion as a Function of Cosmic Structure** 2013 –2014
Green Bank Telescope, 191.2 hours (spring 2013), 80 hours (fall 2013), 175 hours (spring 2014)
 - **Are Pseudobulge and Outer Disk Fueling Linked?** 2011
ARO 12m, 81 hours
 - **Testing the Extreme-Blue Range of SALT/RSS for Quasar Absorption Line Studies** 2010
South African Large Telescope, 1.3 hours
 - **Probing Gas Flows in the Blue Compact Dwarf, NGC 7077** 2011
South African Large Telescope, 4 hours
 - **A Search for Star Formation in the Smith Cloud** 2009
NASA GALEX, 18000 seconds

SELECTED RESEARCH TALKS/SEMINARS

- American Astronomical Society 245 Meeting January 2025
The impact of imperfect charge transfer efficiency on point- and extended-sources in ACS/WFC imaging
- American Astronomical Society 242 Meeting June 2023
Press Conference: Improved Detection of Satellite Trails in HST Imaging
- NRAO Charlottesville Jan 2022
Illuminating galactic fuel supplies and star formation efficiencies with MaNGA, HI-MaNGA, and future surveys
- College of Wooster Dec 2021
Illuminating galactic fuel supplies and star formation efficiencies with MaNGA, HI-MaNGA, and future surveys
- Space Telescope Science Institute May 2021
Understanding galactic gas supplies and star formation efficiencies with the MaNGA and HI-MaNGA surveys
- University of Cape Town March 2021
Understanding galactic gas supplies with MaNGA and HI-MaNGA
- Swarthmore College March 2021
Understanding the galactic gas supply with MaNGA and HI-MaNGA
- APEC Seminar, Kavli IPMU, University of Tokyo March 2021
Invited Talk *Tracing the physics of the neutral and ionized ISM with the HI-MaNGA survey*
- American Astronomical Society 237th meeting January 2021
Tracing the physics of the neutral and ionized ISM with the HI-MaNGA survey
- University of Saint Andrews Seminar December 2020
Invited Talk *Tracing the physics of the neutral and ionized ISM with the HI-MaNGA survey*
- University of Kentucky Astronomy Seminar September 2020
Invited Talk *Tracing the physics of the neutral and ionized ISM with the HI-MaNGA survey*
- 40th Annual Central Pennsylvania Consortium Astronomers' Meeting (remote) June 2020
Exploring the Link Between Cold and Ionized Gas in the HI-MaNGA Galaxy Survey
- Multiphase Gas in Galaxy Groups June 2020*
Invited Talk, *Postponed due to COVID-19
- ALMA Community Day March 2020
All day workshop on radio interferometry and ALMA proposal preparation
- University of Pennsylvania Astronomy Seminar November 2019
Invited Talk *Gas Kinematic Distortions in the MaNGA Survey: Frequency, Impacts, Origins*
- American Astronomical Society 231st Meeting, Washington DC January 2018
Exploring the Origin of Kinematically Irregular Galaxies in MaNGA

- The Interplay Between Local and Global Processes in Galaxies, Cozumel, Mexico April 2016
Multiscale Environmental Influences on Galaxy Gas Reservoirs
- American Astronomical Society 227th meeting, Orlando, FL January 2016
Local and Large-Scale Environmental Influences on Galaxy Gas Content
- American Astronomical Society 225th Meeting, Seattle, WA December 2014
The Influence of Local and Large-Scale Environment on Galaxy Gas Reservoirs in the RESOLVE Survey
- The Galactic Gas Supply Workshop, Green Bank, WV May 2013
Invited Talk, Searching for Star Formation in the Smith Cloud
- Global Properties of HI in Galaxies Workshop, Green Bank, WV April 2012
Probing External Influences on Galaxy H₂/HI Ratios

OTHER PROFESSIONAL ACTIVITIES

- NRAO/GBO Science Review Panel member (Fall 2021 - Spring 2023)
- 2020 ALMA Ambassador
- Referee for the Astrophysical Journal (ApJ), the Monthly Notices of the Royal Astronomical Society (MNRAS), and Astronomy & Astrophysics (A&A)
- NSF panel reviewer (spring 2020)
- Assisted with SDSS-IV information booth at American Astronomical Society 235th meeting
- SDSS-IV MaNGA tutorial writer (<https://www.sdss.org/dr16/manga/manga-tutorials/>)
- SOC for SDSS Collaboration Meeting (June 2018)

PUBLIC OUTREACH

- Ohio State University Monthly Movie Night - Science Fiction vs. Science Fact January 2021
Participated in panel of astronomers to discuss scientific accuracy of the movie "Contact"
- American Astronomical Society Student Outreach Event January 2020
Helped run activities for middle/high school students related to galaxy spectroscopy
- Haverford College Public Observing Night December 2019
Participated in an "ask an astronomer" panel
- SDSS Science Blog Article January 2019
"Getting a handle on MaNGA's cold gas with the HI-MaNGA survey"
- Science Cafe "Universe" July 2017
Public talk entitled "The birth, growth, and death of galaxies" given at Tamarokuto Science Center, Tokyo, Japan
- North Carolina Science Expo April 2014
Organized the "Make Your Own Galaxy" booth designed for kids
- "Astronomy Days" at the North Carolina Museum of Natural Science January 2014
Helped run various booths pertaining to astronomical concepts (the seasons, moon phases, Drake's Equation, galaxy classification, and atomic spectra); primarily for kids
- Chapel Hill Astronomy Club December 2013
Gave overview of radio and IR astronomy for an adult audience of amateur astronomers
- UNC Science Expo April 2012
Participated in a "Make Your Own Galaxy" booth designed for kids
- Greensboro Astronomy Club November 2011
Gave overview of gas in the universe and the missing baryons problem for an adult audience of amateur astronomers
- Morehead Science Center Family Night December 2009
Participated in a "Make Your Own Galaxy" booth designed for kids

FIRST AUTHOR (OR MAJOR INVOLVEMENT) PUBLICATIONS

- [1] G. Mehra, **Stark, D. V.**, and N. Grogin, *Glint in ACS/WFC Imaging Data*, Instrument Science Report ACS 2024-05, 14 pages, Sep. 2024.
- [2] **Stark, David V.**, S. Tuttle, S. Tonnesen, Z. Tu, and S. P. Fillingham, “BreakBRD Galaxies: Evolutionary Clues through an Analysis of Gas Content”, *ApJ*, vol. 971, no. 1, 116, p. 116, Aug. 2024. arXiv: 2406.00635 [astro-ph.GA].
- [3] **Stark, David V.** and N. Grogin, *The Impact of CTE on Point Source Detection in Simulated ACS/WFC Imaging Data*, Instrument Science Report ACS 2024-02, 25 pages, May 2024.
- [4] A. Sharma, K. L. Masters, **Stark, David V.**, J. Garland, N. Drory, A. Fraser-McKelvie, and A.-M. Weijmans, “H I-rich but low star formation galaxies in MaNGA: physical properties and comparison to control samples”, *MNRAS*, vol. 526, no. 1, pp. 1573–1587, Nov. 2023. arXiv: 2309.04854 [astro-ph.GA].
- [5] **Stark, David V.**, N. Grogin, J. Ryon, and R. Lucas, *Improved Identification of Satellite Trails in ACS/WFC Imaging Using a Modified Radon Transform*, Instrument Science Report ACS 2022-8, 25 pages, Dec. 2022.
- [6] J. S. Goddy, **Stark, David V.**, K. L. Masters, K. Bundy, N. Drory, and D. R. Law, “A comparison of the baryonic Tully-Fisher relation in MaNGA and IllustrisTNG”, *MNRAS*, vol. 520, no. 3, pp. 3895–3908, Apr. 2023. arXiv: 2302.05029 [astro-ph.GA].
- [7] E. Frank, **Stark, David V.**, K. Masters, N. Roy, R. Riffel, I. Lacerna, R. A. Riffel, and D. Bizyaev, “The H I content of red geysers galaxies”, *MNRAS*, vol. 519, no. 3, pp. 3312–3318, Mar. 2023. arXiv: 2212.10517 [astro-ph.GA].
- [8] G. Shapiro, **Stark, David V.**, and K. L. Masters, “Testing Algorithms for Identifying Source Confusion in the H I-MaNGA Survey”, *Research Notes of the American Astronomical Society*, vol. 6, no. 1, 1, p. 1, Jan. 2022.
- [9] **Stark, David V.**, K. L. Masters, V. Avila-Reese, R. Riffel, R. Riffel, N. F. Boardman, Z. Zheng, A.-M. Weijmans, S. Dillon, C. Fielder, D. Finnegan, P. Fofie, J. Goddy, E. Harrington, Z. Pace, W. Rujopakarn, N. Samanso, S. Shamsi, A. Sharma, E. Warrick, C. Witherspoon, and N. Wolthuis, “H I-MaNGA: tracing the physics of the neutral and ionized ISM with the second data release”, *MNRAS*, vol. 503, no. 1, pp. 1345–1366, May 2021. arXiv: 2101.12680 [astro-ph.GA].
- [10] J. Goddy, **Stark, David V.**, and K. L. Masters, “L-band Calibration of the Green Bank Telescope from 2016 2019”, *Research Notes of the American Astronomical Society*, vol. 4, no. 1, 3, p. 3, Jan. 2020. arXiv: 2001.10795 [astro-ph.IM].
- [11] K. L. Masters, **Stark, David V.**, Z. J. Pace, F. Phipps, W. Rujopakarn, N. Samanso, E. Harrington, J. R. Sánchez-Gallego, V. Avila-Reese, M. Bershad, B. Cherinka, C. E. Fielder, D. Finnegan, R. A. Riffel, K. Rowlands, S. Shamsi, L. Newnham, A.-M. Weijmans, and C. A. Witherspoon, “H I-MaNGA: H I follow-up for the MaNGA survey”, *MNRAS*, vol. 488, no. 3, pp. 3396–3405, Sep. 2019. arXiv: 1901.05579 [astro-ph.GA].
- [12] **Stark, David V.**, K. A. Bundy, K. Westfall, M. Bershad, A.-M. Weijmans, K. L. Masters, S. Kruk, J. Brinchmann, J. Soler, R. Abraham, E. Cheung, D. Bizyaev, N. Drory, A. R. Lopes, and D. R. Law, “SDSS-IV MaNGA: characterizing non-axisymmetric motions in galaxy velocity fields using the Radon transform”, *MNRAS*, vol. 480, no. 2, pp. 2217–2235, Oct. 2018. arXiv: 1807.11503 [astro-ph.GA].
- [13] M. P. Haynes, R. Giovanelli, B. R. Kent, E. A. K. Adams, T. J. Balonek, D. W. Craig, D. Fertig, R. Finn, C. Giovanardi, G. Hallenbeck, K. M. Hess, G. L. Hoffman, S. Huang, M. G. Jones,

- R. A. Koopmann, D. A. Kornreich, L. Leisman, J. Miller, C. Moorman, J. O'Connor, A. O'Donoghue, E. Papastergis, P. Troischt, **Stark, David**, and L. Xiao, "The Arecibo Legacy Fast ALFA Survey: The ALFALFA Extragalactic H I Source Catalog", *ApJ*, vol. 861, no. 1, 49, p. 49, Jul. 2018. arXiv: 1805.11499 [astro-ph.GA].
- [14] **Stark, David V.**, K. A. Bundy, M. E. Orr, P. F. Hopkins, K. Westfall, M. Bershadly, C. Li, D. Bizyaev, K. L. Masters, A.-M. Weijmans, I. Lacerna, D. Thomas, N. Drory, R. Yan, and K. Zhang, "SDSS-IV MaNGA: constraints on the conditions for star formation in galaxy discs", *MNRAS*, vol. 474, no. 2, pp. 2323–2333, Feb. 2018. arXiv: 1711.00178 [astro-ph.GA].
- [15] **Stark, David V.**, S. J. Kannappan, K. D. Eckert, J. Florez, K. R. Hall, L. C. Watson, E. A. Hoversten, J. N. Burchett, D. T. Guynn, A. D. Baker, A. J. Moffett, A. A. Berlind, M. A. Norris, M. P. Haynes, R. Giovanelli, A. K. Leroy, D. J. Pisano, L. H. Wei, R. E. Gonzalez, and V. F. Calderon, "The RESOLVE Survey Atomic Gas Census and Environmental Influences on Galaxy Gas Reservoirs", *ApJ*, vol. 832, no. 2, 126, p. 126, Dec. 2016. arXiv: 1610.06932 [astro-ph.GA].
- [16] E. Cheung, **Stark, David V.**, S. Huang, K. H. R. Rubin, L. Lin, C. Tremonti, K. Zhang, R. Yan, D. Bizyaev, M. Boquien, J. R. Brownstein, N. Drory, J. D. Gelfand, J. H. Knapen, R. Maiolino, O. Malanushenko, K. L. Masters, M. R. Merrifield, Z. Pace, K. Pan, R. A. Riffel, A. Roman-Lopes, W. Rujopakarn, D. P. Schneider, J. P. Stott, D. Thomas, and A.-M. Weijmans, "SDSS-IV MaNGA: A Serendipitous Observation of a Potential Gas Accretion Event", *ApJ*, vol. 832, no. 2, 182, p. 182, Dec. 2016. arXiv: 1609.02155 [astro-ph.GA].
- [17] **Stark, David V.**, A. D. Baker, and S. J. Kannappan, "A search for star formation in the Smith Cloud", *MNRAS*, vol. 446, no. 2, pp. 1855–1863, Jan. 2015. arXiv: 1410.4845 [astro-ph.GA].
- [18] **Stark, David V.**, S. J. Kannappan, L. H. Wei, A. J. Baker, A. K. Leroy, K. D. Eckert, and S. N. Vogel, "The Fueling Diagram: Linking Galaxy Molecular-to-atomic Gas Ratios to Interactions and Accretion", *ApJ*, vol. 769, no. 1, 82, p. 82, May 2013. arXiv: 1304.4245 [astro-ph.CO].
- [19] S. J. Kannappan, **Stark, David V.**, K. D. Eckert, A. J. Moffett, L. H. Wei, D. J. Pisano, A. J. Baker, S. N. Vogel, D. G. Fabricant, S. Laine, M. A. Norris, S. Jogee, N. Lepore, L. E. Hough, and J. Weinberg-Wolf, "Connecting Transitions in Galaxy Properties to Refueling", *ApJ*, vol. 777, no. 1, 42, p. 42, Nov. 2013. arXiv: 1308.3292 [astro-ph.CO].
- [20] **Stark, David V.**, S. S. McGaugh, and R. A. Swaters, "A First Attempt to Calibrate the Baryonic Tully-Fisher Relation with Gas-Dominated Galaxies", *AJ*, vol. 138, no. 2, pp. 392–401, Aug. 2009. arXiv: 0905.4528 [astro-ph.CO].

OTHER COAUTHORED PUBLICATIONS

- [21] M. E. Wisz, K. L. Masters, K. J. Daniel, **Stark, David V.**, and F. Belfiore, "The Impact of Bars, Spirals and Bulge-Size on Gas-Phase Metallicity Gradients in MaNGA Galaxies", *arXiv e-prints*, arXiv:2502.10922, arXiv:2502.10922, Feb. 2025. arXiv: 2502.10922 [astro-ph.GA].
- [22] K. Masters and **Stark, David**, "HI-MaNGA: Results from (21cm-HI) single-dish observations of MaNGA Survey Galaxies", *arXiv e-prints*, arXiv:2502.09505, arXiv:2502.09505, Feb. 2025. arXiv: 2502.09505 [astro-ph.GA].
- [23] B. DiGiorgio Zanger, K. B. Westfall, K. Bundy, N. Drory, M. A. Bershadly, S. Campbell, A.-M. Weijmans, K. L. Masters, **Stark, David**, and D. Law, "The Strength of Bisymmetric Modes in SDSS-IV/MaNGA Barred Galaxy Kinematics", *ApJ*, vol. 973, no. 2, 116, p. 116, Oct. 2024. arXiv: 2407.11908 [astro-ph.GA].

- [24] N. Yu, Z. Zheng, C.-W. Tsai, P. Zuo, S. L. Ellison, **Stark, David V.**, D. Li, J. Wu, K. L. Masters, T. Xiao, Y. Zheng, Z. Li, K. Zhang, H. Chen, S. Liu, S. Jiao, and F. Meng, “The ALMaQUEST Survey XV: The dependence of the molecular-to-atomic gas ratios on resolved optical diagnostics”, *Science China Physics, Mechanics, and Astronomy*, vol. 67, no. 9, 299811, p. 299 811, Sep. 2024. arXiv: 2403.19447 [astro-ph.GA].
- [25] D. S. Carr, S. J. Kannappan, M. A. Norris, M. Sinha, M. L. Palumbo, K. D. Eckert, A. J. Moffett, M. S. Polimera, J. I. Bernstein, Z. L. Hutchens, and **Stark, David V.**, “Identification and Quenching of Nugget Galaxies in the RESOLVE Survey at $z = 0$ ”, *ApJ*, vol. 968, no. 1, 18, p. 18, Jun. 2024. arXiv: 2406.04547 [astro-ph.GA].
- [26] S. Eggl, Z. Benkhaldoun, G. Micheva, S. T. Spencer, **Stark, David V.**, B. Winkel, M. Rawls, and M. W. Peel, “SatHub Panel: Satellite Interference in Observatories Around the World”, *arXiv e-prints*, arXiv:2408.15222, arXiv:2408.15222, Aug. 2024. arXiv: 2408.15222 [astro-ph.IM].
- [27] N. Salem, K. L. Masters, **Stark, David V.**, and A. Sharma, “Finding Passive Galaxies in H I-MaNGA: The Impact of Star Formation Rate Indicator”, *Research Notes of the American Astronomical Society*, vol. 8, no. 7, 188, p. 188, Jul. 2024. arXiv: 2409.09574 [astro-ph.GA].
- [28] M. Hoosain, S.-L. Blyth, R. E. Skelton, S. J. Kannappan, **Stark, David V.**, K. D. Eckert, Z. L. Hutchens, D. S. Carr, and K. Kraljic, “The effect of cosmic web filaments on galaxy properties in the RESOLVE and ECO surveys”, *MNRAS*, vol. 528, no. 3, pp. 4139–4159, Mar. 2024. arXiv: 2401.09114 [astro-ph.GA].
- [29] Z. L. Hutchens, S. J. Kannappan, A. A. Berlind, M. Asad, K. D. Eckert, **Stark, David V.**, D. S. Carr, E. R. Castelloe, A. J. Baker, K. M. Hess, A. J. Moffett, M. A. Norris, and D. Croton, “The RESOLVE and ECO Gas in Galaxy Groups Initiative: The Group Finder and the Group H I-Halo Mass Relation”, *ApJ*, vol. 956, no. 1, 51, p. 51, Oct. 2023.
- [30] W. Li, P. Nair, K. Rowlands, K. Masters, **Stark, David**, N. Drory, S. Ellison, J. Irwin, S. Satyapal, A. Jones, W. Keel, K. Mukundan, and Z. Tu, “Post-starburst properties of post-merger galaxies”, *MNRAS*, vol. 523, no. 1, pp. 720–738, Jul. 2023. arXiv: 2305.07474 [astro-ph.GA].
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