SEAN D. JOHNSON

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EDUCATION

- PhD. in Astronomy & Astrophysics, The University of Chicago, Chicago, IL *2016*
- M.S. in Astronomy & Astrophysics, The University of Chicago, Chicago, IL *2011*
- B.S. in Mathematics & B.A. in Physics, The University of Chicago, Chicago, IL *2010*

RESEARCH APPOINTMENTS

- Assistant Professor of Astronomy, University of Michigan, Ann Arbor, MI *2020-present*
- LSA Collegiate Senior Fellow, University of Michigan, Ann Arbor, MI *2020-present*
- Carnegie-Princeton Prize Postdoctoral Fellow, Princeton University, Princeton, NJ *2016-2020*
- NASA Hubble Prize Postdoctoral Fellow, Princeton University, Princeton, NJ *2016-2019*

RESEARCH HIGHLIGHTS

- Eleven first-author papers and fourteen second-author papers in peer-reviewed journals, including a dozen led by myself or group members since joining the faculty at Michigan
- Over 2900 citations, h-index: 32
- Twenty invited colloquia, conferences, workshops, and panels since joining the faculty at Michigan
- $2.3 million in grants awarded as PI or co-PI, with $1.5 million to Michigan
- Awarded nine PI & four co-PI programs on *Hubble* (over 500 orbits) in Cycles $25-33$ (2017-present), including 298 orbits since joining the faculty at Michigan (158 as PI, 140 as co-PI)
- Member of the VLT's MUSE GTO team
- co-chair of an ELT+MOSAIC Science Working Group 2 focused on CGM/IGM tomography

SELECTED FELLOWSHIPS AND AWARDS

- Joint Carnegie−Princeton Fellowship *2016 – 2020*
- NASA Hubble Fellowship *2016 – 2019*
- American Astronomical Society Rodger Doxsey Travel Prize *2015*
- National Science Foundation Graduate Research Fellowship *2010 – 2015*
- Brinson Pre-doctoral Fellow at the Carnegie Observatories *2013 – 2014*

FUNDING AND TELESCOPE PROPOSALS AS PI/CO-PI:

- *National Science Foundation Astronomy & Astrophysics Research Grant* (2025): "Tracing the circumgalactic gas flows around quasars in emission and absorption at intermediate redshift" (sole PI; $397k to UM)
- *Binational Science Foundation Grant* (2025): "Circumgalactic media without a hot phase: Physics and Observables" (co-PI's J. Stern at Tel Aviv, C.-A. Faucher-Giguere at Northwestern, and S. Johnson at Michigan; $300k total with $100k to UM)

– *Hubble Space Telescope* Cycle 33:

  ⋆ GO-18107 – 70 orbits: "Baryonic Escape, Abundances, and Thermodynamics in Cosmic Ecosystems (BEATriCE)" (PI Johnson, co-PI's Chen, Rudie, Qu, Zahedy; $182k total and $56k awarded to UM)

  ⋆ GO-18039 – 9 orbits: "Confirming and Characterizing a Fast, Cool Inflow Toward a Luminous Quasar at $z = 0.78$" (PI UM grad student W. Liu, co-PI Johnson; $51k awarded to UM)

– *Future Investigators in NASA Earth and Space Science and Technology (FINESST) 2025*: "Probing the Gaseous Cosmic Ecosystems of Massive Halos with Integral Field Spectroscopy of Giant, Optically Emitting Nebulae" (FI W. Liu, admin PI Johnson, $100k awarded to UM)

– *Hubble Space Telescope* Cycle 32:

  ⋆ GO-17800 – 147 object snapshot survey: "Diagnostics of AGN Feedback with the first UV atlas of obscured quasars" (PI; $150k awarded to UM)

  ⋆ GO-17803 – 51 orbits: "The first multi-phase survey of the circumgalactic medium of quasar hosts at $z < 1$" (PI; $150k total, $117k awarded to UM)

– *Hubble Space Telescope* Cycle 31:

  ⋆ GO-17517 – 131 orbits: "CONTACT: Circumgalactic Observations of Nuv-shifted Transitions Across Cosmic Time" (PI Chen, co-PI's Johnson & Rudie; $230k total, $75k awarded to UM)

– *Hubble Space Telescope* + Very Large Array in Cycle 29:

  ⋆ GO-16728 – 4 orbits: "Physical diagnostics of AGN feedback from the first spatially resolved UV spectra of a jet-driven AGN outflow" (PI; $113k awarded to UM)

– *Hubble Space Telescope* Cycle 27:

  ⋆ GO-15935 – 21 orbits: "UV diagnostics as barometers for galactic scale AGN outflows" (PI, $142k total, $98k to UM)

  ⋆ GO-15835 – 4 orbits: "Near-Ultraviolet Follow-up of the X-ray-detected Warm-Hot Intergalactic Medium Toward 1ES 1553+113" (PI Muzahid, co-PI Johnson; $40k total, $27k to UM)

– *Hubble Space Telescope* Cycle 26:

  ⋆ GO-15655 – 39 orbits: "The first high resolution view of the full extent, morphology, and multi-phase nature of radio-loud and quiet AGN feedback with ACS+SBC" (PI; $184k, $70k to UM)

– *Hubble Space Telescope* Cycle 25:

  ⋆ GO-15163 – 169+169 (prime+parallel) orbits: "COS Ultraviolet Baryon Survey" (PI Chen, co-PI's Johnson and Rudie)

  ⋆ GO-15279 – 124 object snapshot survey: "Unveiling Quasar Fueling through a Public Snapshot Survey of Quasar Host Environments" (PI; $170k to Carnegie)

  ⋆ GO-15280 – 5 orbits: "Spatially resolved rest-UV spectroscopy of a prototypical quasar driven superwind at low-z" (PI; $84k, $78k to UM)

  ⋆ GO-15298 – 15 orbits: "The first high resolution image of coronal gas in a starbursting cool core cluster" (PI; $78k to UM)

– Magellan 6.5-m: ≈ 80 nights in 2016B–present

– DuPont 2.5-m: 22 nights in 2016–2017

– CTIO Blanco 4-m: 2 nights in 2016A

– NOAO Mayall 4-m: 1 night in 2015A

– ARC 3.5-m: 24 half-nights in 2011-2013

WHITE PAPERS AND OTHER STRATEGIC OBSERVATORY PLANNING WORK

11. Lead author of a white paper, *Establishing the Hubble FUV+NUV legacy at $z \approx 1$ for the era of Roman: enabling a decade of foundational absorption-line research and preparing for the Habitable Worlds Observatory*, 2026, for the STScI call, "Building a Roadmap for HST Science into the 2030s"

10. Co-chair of a Science Working Group for the MOSAIC instrument being built for the 39-meter Extremely Large Telescope, 2025-present

9. Author of approximately one-third of the circumgalactic medium science case for an ESA-contributed high-resolution UV spectrograph on the Habitable World's Observatory, 2026

8. Led a survey of users of the FourStar near-IR Imaging Camera for the 6.5-meter Magellan Telescopes Science Advisory Committee in collaboration with SAC Chair Dr. Drew Newman

7. Led the Circumgalactic Medium science case for the Theon UV telescope proposal for the European Space Agency M8 call, 2025

6. Science Advisor for the Magellan Infrared Multi-object Spectrograph (MIRMOS), proposed for the 6.5-meter Magellan Telescopes, 2020−present

5. Chen, H.-W., **Johnson, S. D.**, Rudie, G. C., et al. 2019, *Tracking the Baryon Cycle in Emission and in Absorption*, BAAS, 51, 329, for the National Academies ASTRO 2020 Decadal Survey

4. Newman, A., Bezanson, R., **Johnson, S.**, et al. 2019, *Resolving Galaxy Formation at Cosmic Noon* BAAS, 51, 145, for the National Academies ASTRO 2020 Decadal Survey,

3. Rudie, G. C., Chen, H.-W., Newman, A. B., **Johnson, S. D.**, et al. 2019, *Observing Galaxies and Dissecting their Baryon Cycle at Cosmic Noon* BAAS, 51, 148, for the National Academies ASTRO 2020 Decadal Survey

2. Burchett, J., Butsky, I., Tremmel, M., et al., including **Johnson, S. D.**, 2019, *Ultraviolet Perspectives on Diffuse Gas in the Largest Cosmic Structures* BAAS, 51, 534, for the National Academies ASTRO 2020 Decadal Survey

1. Chen, H.-W., **Johnson, S. D.**, Rudie, G. C., et al. 2018, *Building Galaxies from Cosmic Gas*, Giant Magellan Telescope Science Book, Chapter 7

TEACHING, MENTORING, AND PUBLIC OUTREACH

University of Michigan Didactic Teaching *2021-present*

– ASTRO 102: Stars, Galaxies, and the Universe–6 semesters
– ASTRO 201: Introduction to Astrophysics (for majors)–1 semester
– ASTRO 220: New Discoveries in Astronomy–1 semester
– ASTRO 533 (graduate): Structures and Content of Galaxies–2 semesters
– ASTRO 571: The Intergalactic and Circumgalactic Medium–1 semester

University of Michigan Teaching Workshops *2021-present*

– Center for Research on Learning & Teaching: Teaching with GSIs workshop participant (2025)
– Center for Research on Learning & Teaching: Large Course Initiative participant (2023)

Graduate Student and Postdoc Mentorship *2021-present*

– Primary mentor to Nishant Mishra, a 4rd year graduate student in the Department of Astronomy. One student-led paper published in ApJ with two in advanced draft stages
– Primary mentor to Will Liu, a 5th year graduate student in the Department of Astronomy. Awarded a 2025 NASA Future Investigators in NASA Earth and Space Science Fellowship award in 2025 and PI of a successful HST Cycle 33 program. Three papers published. Defense scheduled for June 2026
– Primary mentor to Jennifer Li, who started as a postdoc Astronomy at U. Michigan in 2021, became a Schmidt AI in Science Fellow jointly in the Department of Astronomy and Michigan Institute for Data Science in 2022, and started a position as a permanent Research Scientist at the National Center for Supercomputing Applications at UIUC in 2024
– Thesis committee membership: Patrick Barnes (physics), CJ Harris (astro), Huai-Hsuan (Sandy) Chiu (astro), Korbin Waters (astro), Vaishnav (Vai) Rao (astro)

Undergraduate and Postbaccalaureate Student Mentorship *2017-present*

– Primary research mentor for U-M undergraduate students A. Gaishin (astro major), A. Kadri (astro; contributing co-author on a ApJ paper), J. Dupuis (astro; published a Research Note with AAS), C. D'Sa (aerospace engineering; presented a U-M poster), and Suri Leung (astro)
– Primary research mentor for U-M undergraduate (physics major) and astro dept. postbaccalaureate student E. Fuller. Student-led paper published in ApJ. E. Fuller is now a graduate student at CU Boulder
– Primary research mentor to undergraduate students J. VanHorn and P. Pitiak at U. Michigan through UROP; Blue Ribbon UROP poster award
– Primary research mentor to J. Dorigo Jones, a postbaccalaureate student at U. Michigan working on inferring blazar redshifts from the Lyα forest. Student-led paper published in MNRAS. J. Dorigo Jones defended his PhD in astrophysics at CU Boulder and will soon start a Director's Postdoctoral Fellowship at LANL
– Primary research mentor for J. Helton, a Princeton undergraduate student working on surveys of quasar fueling starting with a summer project and continuing as a junior year research project. Student-led paper published in MNRAS. J. Helton obtained a PhD in Astronomy from U. Arizona and is now an Evolving Universe Postdoctoral Fellow at Penn State
– Primary research mentor for J. Somalwar, a Princeton undergraduate student working on UV diagnostics of quasar feedback from HST (Cycle 25, PI: S. Johnson, PID: 15280). Student-led final paper published in ApJ Letters. J. Somalwar completed her PhD at Caltech in 2025 and is now a Kavli Prize Postdoctoral Fellow at KIPAC and Stanford
– Primary mentor for L. Borders, an NSF−INCLUDES REU student. LeeRoy conducted measurements in SDSS spectra to provide targets for an on-going HST snapshot survey (Cycle 25, PI: S. Johnson, PID: 15279) and continued on to Rutgers University as a Computer Science Major.

High School Research Advisor through Wolverine Pathways and Bellaire High School *2017-present*

– Advised ≈ 3 high school students per year in research projects using SDSS spectra through the Wolverine Pathways (2022-2024), expanded to six interns in 2025
– Advised over ten high school students in research projects using SDSS spectra (2017-2021)

Public talks and interviews

– Organized star parties for the Wolverine Pathways Senior Overnighter at the Detroit Observatory in 2024, 2025, and 2026, attended by ≈ 50 Pathways Scholars in each year
– McCormick Observatory Pride Night Talk, 2023
– A Historical Guide to the Galaxy–interview for the Historic.ly podcast, 2022
– Building Extremely Large Telescopes, Astronomy on Tap Trenton, 2019

Co-founder of Astronomy on Tap Trenton *2019-2020*

– Coordinator of public astronomy talks in Trenton, NJ (≈40 members of the public in attendance)

Volunteer Math Professor, Princeton Prison Teaching Initiative *2016-2020*

– Teaching for-credit college level math and statistics classes in state and federal prisons
– Five semesters teaching courses including: Statistics, Elementary Algebra, & Intermediate Algebra

Grad. Extragalactic Astronomy and Cosmology (AST 522), Princeton University *2017*

– Guest lecturer for one class on the Intergalactic Medium

Instructor, Lifelong Learning *2015-2016*

– Taught hands-on courses on stars and spectroscopy as part of an education program for older adults

Instructor, Yerkes Winter & Summer Institute *2011-2015*

– 1-week, overnight science camps for students in The University of Chicago Upward Bound Program
– Lead Instructor in 2012

Space Explorers Instructor, The Kavli Institute for Cosmological Physics *2011 – 2012*

– Designed and taught a novel, year-long science course on order-of-magnitude estimation to 20 inner-city high school students from The University of Chicago Upward Bound Program

Instructor, The University of Chicago Department of Astronomy & Astrophysics *2010*

– CAPSTONE curriculum development course in astronomical databases for public high school students and teachers

Teaching Assistant, The University of Chicago Department of Mathematics *2009*

– Studies in Mathematics I: Number theory

CONFERENCES, WORKSHOPS, COLLOQUIA, AND ACADEMIC PANELS

†Invited

– †International Space Science Institute workshop on chemical evolution of galaxies, Switzerland *2026*
– †Symposium on Donald York's Astronomical Research & Legacy, Chicago, IL *2026*
– The Metal-Poor Frontier, STScI Symposium *2026*
– †Black Hole Weather, Sexten Center for Astrophysics, Italy *2025*
– †Physics Colloquium, University of North Texas, TX *2025*
– Cosmic Ecosystems, Perimeter Institute for Theoretical Physics, Canada *2025*
– Magellan Science Meeting, Carnegie Institution for Science, Washington D.C. *2025*
– †Dear Colleagues series panelist, Bowman Center, U. Michigan *2025*
– †AAAS SEA Change Panel, Boston, MA *2025*
– Resolving the Circumgalactic Medium and its Impact on Galaxy Evolution, ESO conference, Chile *2024*
– †Astronomy Colloquium, Michigan State University *2024*
– †What Matter(s) Around Galaxies, Italy *2024*

– Recipes to Regulate Star Formation, STScI Symposium, Baltimore *2024*
– †Astronomy Colloquium, The Ohio State University *2023*
– †NASA Cosmic Origins Diffuse Gas in Cosmic Ecosystems Science Interest Group Talk *2023*
– †The Evolution of Gas in and around Galaxies, NRAO conference, Stanley, Idaho *2023*
– †Astronomy Colloquium, University of Virginia *2023*
– †Review of the CGM in the UV, Science with the Line Emission Mapper conference, Harvard, MA *2023*
– †Review of Integral Field Spectrographs and the CGM, Oases in the Cosmic Desert, ASU, AZ *2023*
– Multi-phase, Multi-temperature, and Complex AGN feedback conference, Garching, Germany *2022*
– What Matter(s) Around Galaxies, Italy *2022*
– †Astronomy Colloquium, Texas A&M University *2022*
– †Academic Freedom and Responsibility, Bowman Center, U. Michigan *2022*
– †Astronomy Colloquium, Notre Dame University, IN *2022*
– Spatially Resolved Spectroscopy with ELTs, ESO conference, Oxford, U.K. *2021*
– †Astronomy Colloquium, UCLA, CA *2021*
– †Summer Astronomy Colloquium, Princeton University, NJ *2020*
– †Tea Talk, Kavli Institute for Particle Astrophysics and Cosmology, Stanford University *2020*
– †Astronomy Colloquium, The University of Texas at Austin, TX *2020*
– †Astronomy Colloquium, The University of Michigan, Ann Arbor, MI *2019*
– †Circumgalactic Medium Workshop (invited), Harnack House, Berlin, Germany *2019*
– †The Cosmic Baryon Cycle, GMT Community Science Meeting, CA *2019*
– What Matter(s) Between Galaxies, Spineto, Italy *2019*
– MUSE Busy Week, Goslar, Germany *2019*
– Hubble Symposium, STScI, Baltimore, MD *2019*
– Extremely Big Eyes on the Early Universe, US ELT conference, UCLA, CA *2019*
– †Circumgalactic Medium Workshop, Northwestern University, IL *2018*
– †Multiphase AGN feeding and feedback, Sexten Center for Astrophysics *2018*
– MUSE Busy Week, Hendaye, France *2018*
– †Astronomy Colloquium, The University of Pittsburgh *2018*
– †Lunch Seminar, Leiden Observatory *2018*
– American Astronomical Society Winter Meeting, Washington DC *2018*
– Hubble Symposium, STScI, Baltimore, MD *2017*
– †Chemical Evolution of the Universe, GMT Community Science Meeting *2017*
– †Whereabouts the Baryons (invited), Sexten Center for Astrophysics *2017*
– MUSE Busy Week, Spineto, Italy *2017*
– Wherabout and Physics of the Roaming Baryons, Sexten Center for Astrophysics, Italy *2017*

– Thunch talk, Princeton University *2017*
– †Astronomy Colloquium, University of Pennsylvania *2017*
– Magellan Science Meeting, Washington D.C. *2016*
– Lunch Seminar, Leiden Observatory *2016*
– Thesis talk, AAS Winter meeting *2016*
– †Astronomy Colloquium, University of Illinois at Urbana−Champaign *2015*
– Observations of gas accretion onto galaxies, NRAO *2015*
– Galread, Princeton University *2015*
– Astro lunch talk, Yale University *2015*
– Galform talk, The University of California at Berkeley *2015*
– IGM@50, Abbazia di Spineto, Italy *2015*
– Science Lunch Talk, University of Wisconsin at Madison *2015*
– Tea Talk, Caltech *2015*
– Galaxies in Absorption, Paris *2014*
– Intergalactic Matters, Heidelberg *2014*
– National Science Teachers Association, San Antonio *2013*
– SciCoder, New York City *2011*

SCIENTIFIC COMMUNITY, DEPARTMENT, AND UNIVERSITY SERVICE

Referee and reviewer for *2016−present*

– National Science Foundation: two panels since 2020
– NASA FINESST Program external evaluator
– NASA ADAP Program panelist
– Hubble Space Telescope CGM/IGM Panel: two panels since 2020 in addition to serving as an external proposal evaluator twice
– NASA Earth and Space Science Graduate Research Fellowship Program
– Peer reviewer for Nature, Nature Astronomy, ApJ, ApJ Letters, MNRAS, A&A

Department and University Service

– Preparing Future Faculty panel, CRLT/Rackham (2026)
– Association of Universities for Research in Astronomy member representative (2025-present)
– Magellan Science Advisory Committee (2025-present)
– Rackham Faculty Ally for the Department of Astronomy (2022-present)
– Co-author of two adopted Faculty Senate Resolutions urging the university to end its pause of gender affirming care for adult and youth patients aged 18 and under as well as end a newly adopted policy of discriminating against transgender, non-binary, and intersex students in intramural athletics programs run by the Office of Student Life
– Telescope Allocation Committee, University of Michigan (2020-2021, 2021-2022, 2023B, acting chair during review meeting, 2025B)
– Prelim Committee, Department of Astronomy (2024-2025)
– SEA Change Committee, Department of Astronomy (2022-2024)

– Opportunity and Climate Committee Chair, Department of Astronomy (2023-2024)
– Faculty search committee member (2023-2024)
– Member of the LGBTQ+ College-wide Working Group appointed by the Dean of LSA (2022-2023)
– Panelist for the LSA Teaching Academy (2023, 2024)
– Co-led group of five faculty who pushed to change U. Michigan's Rackham Graduate School policy surrounding data disclosure to improve protections of LGBTQ+ students (2022-2023)
– Association of Universities for Research in Astronomy alternate member representative (2022-2025)
– Co-author of an open letter signed by over 200 members of the U. Michigan community advocating that inclusive teaching is necessary for effective pedagogy, 2021
– Graduate Admissions Committee member, University of Michigan (2020-2021, 2021-2022)
– NextProf Committee member, University of Michigan (2020-2021, 2021-2022)
– Conversations in Equity and Inclusion Series organizer, University of Michigan (2021-2022)
– Colloquium Organizer, University of Michigan (2021-2022)
– Department Preview application evaluator, University of Michigan (2020-2021)
– Organized Department presence/recruiting at SACNAS, University of Michigan (2020-2021)
– Postdoc representative to Princeton's Department Climate and Diversity Committee (2019-2020)
– Student representative to the graduate admissions committee at U. Chicago (2015-2016)
– Student representative to the curriculum committee at U. Chicago (2012-2013)

FIRST AND SECOND AUTHOR JOURNAL ARTICLES

‡Primary advisor for undergraduate or postbaccalaureate student
†Primary advisor for graduate student
⋆Primary advisor for postdoc
*Paper included in this package
Note: In Astronomy and Astrophysics, the convention is for the PI to be listed as the second author on publications led by group members. Paper links are included with the journal name and volume/page numbers and highlighted in blue text

26. ‡Dupuis, D and **Johnson, S. D.**, *Lyman Limit System Candidates in Quasars at Redshift* $0.75 < z < 1.25$ *and Near-UV magnitude* < 19, 2026, Research Notes of the AAS, 10, 160

25. *†Liu, Z., **Johnson, S. D.**, et al., *A Comprehensive Study of Morphology and Kinematics in Extended Nebulae Around UV Luminous Quasar at* $z \approx 1$, in review with ApJ, arXiv:2605.01981

24. *‡Fuller, E., **Johnson, S. D.**, Stern., J., Chen, H.-W., Choi, E., Faucher-Giguère, C.-A., Gaspari, M., Goulding, A., Greene, J., Heckman, T. M.,⋆Li, J. I.-H., †Liu, Z., †Mishra, N., Nyland, K., Rowlands, K., Rudie, G. C., Schneider, E., Wylezalek, D., Zakamska, N. L., 2026, *Under Pressure: UV Emission Line Ratios as Barometers of AGN Feedback Mechanisms*, ApJ, 1000, 229

23. ***Johnson, S. D.**, †Mishra, N., Muzahid, S., Rudie, G. C., Zahedy, F. S., Qu, Z., Faucher-Giguère, C.-A., Stern, J.,⋆Li, J. I.-H., Fuller, E., Cantalupo, S., Chen, H.-W., Kadri, A., Kumar, S., †Liu, Z., Walth, G., 2026, *MUSEQuBES: Physical conditions, origins, and multi-element abundances of the circumgalactic medium of an isolated, star-forming dwarf galaxy at* $z = 0.57$, ApJ Letters, 996, L30

22. *†Liu, Z., **Johnson, S. D.**, Li J. I.-H., Epinat, B., Rudie, G. C., Monrael-Ibero, A., Cantalupo, S., Qu, Z., Chen, M. C., Kollatschny, W., Muzahid, S., Zahedy, F. S., Fuller, E., †Mishra, N., 2025, *The Morphology and Kinematics of a Giant, Symmetric Nebula Around a Radio-Loud Quasar 3C 57: Extended Rotating Gas or Biconical Outflows?*, ApJ, 986, 87

21. ⋆Li, J. I-H, **Johnson, S. D.** and Avestruz, C., Jarugula, S., Shen, Y., Kesler, E., †Liu, Z., Mishra, N., 2024, *Fast and Flexible Inference Framework for Continuum Reverberation Mapping using Simulation-based Inference with Deep Learning*, ApJ, 977, 223

20. *†Mishra, N, **Johnson, S. D.**, Rudie, G. C., Chen, H.-W., Schaye, J., Qu, Z., Zahedy, F. S., Boettcher, E. T., Cantalupo, S. Chen, M. C., Faucher-Giguère, C.-A., Greene, J. E. and Li, J. I-H., Zhuoqi , L., Lopez, S., Petitjean, P., 2024, *The Cosmic Ultraviolet Baryon Survey (CUBS) IX: The enriched circumgalactic and intergalactic medium around star-forming field dwarf galaxies traced by O VI absorption*, ApJ, 976, 1, 149

19. ***Johnson, S. D.**, †Liu, Z., Li J. I.-H.,, Schaye, J., Greene, J. E., Cantalupo, S., Rudie, G. C., Qu, Z., Chen, H.-W., Rafelski, M., Muzahid, S., Chen, M. C., Contini, T., Kollatschny, W., †Mishra, N., Petitjean, P., Rauch, M., Zahedy, F. Z., 2024, *Discovery of optically emitting circumgalactic nebulae around the majority of UV-luminous quasars at intermediate redshift*, ApJ, 966, 2, 218

18. *⋆Li J. I.-H., **Johnson, S. D.**, Boettcher, E., Cantalupo, S., Chen, H.-W., Chen, M. C., DePalma, D., †Liu, Z., †Mishra, N., Petitjean, P., Qu, Z., Rudie, G. C., Schaye, J., Zahedy, F. S., 2024, *The Cosmic Ultraviolet Baryon Survey (CUBS) VIII: Group Environments of the Most Luminous Quasars at $z \approx 1$*, ApJ, 965, 2, 143

17. *†Liu, Z., **Johnson, S. D.**, Li J. I.-H., Rudie, G. C., Schaye, J., Chen, H.-W., Brinchmann, J., Cantalupo, S., Chen, M. C., Kollatschny, W., †Mishra, N., Muzahid, S., 2024, *The first comprehensive study of a giant nebula around a radio-quiet quasar in the $z < 1$ Universe*, MNRAS, 527, 3, 5429

16. ***Johnson, S. D.**, Schaye, J., Walth, G. L., Li J. I.-H., Rudie, G. C., Chen, H.-W., Chen, M. C., Epinat, B., Gaspari, M., Cantalupo, S., Kollatschny, W., †Liu, Z., Muzahid, S. 2022, *Directly Tracing Cool Filamentary Accretion over >100 kpc into the Interstellar Medium of a Quasar Host at z=1*, ApJ Letters, 940, L40

15. *‡Dorigo Jones, J., **Johnson, S. D.**, Muzahid, S., Charlton, J., Chen, H.-W., Narayanan, A., Sameer, Schaye, J., Wijers, N. A., 2022, *Improving blazar redshift constraints with the edge of the Lyα forest: 1ES 1553+113 and implications for observations of the WHIM*, MNRAS, 509, 4330D

14. ‡Helton, J., **Johnson, S. D.**, Greene, J. E., Chen, H.-W., 2021, *Discovery and origins of giant optically emitting nebulae around PKS 0454-22*, MRNAS, 505, 5497

13. ‡Somalwar, J., **Johnson, S. D.**, Stern, J., Goulding, A .D., Greene, J. E, Zakamska, N. L., Alexandroff, R. M., Chen, H.-W., 2020, *The first spatially resolved rest-UV spectroscopy of a prototypical quasar driven superwind at low-z*, ApJ Letters, 890, 28

12. **Johnson, S. D.**, Mulchaey, J. S., Chen, H.-W., Wijers, N. A., Connor, T., Muzahid, S., Schaye, J., Cen, R., Carlsten, S. G., Charlton, J., Drout, M. R., Goulding, A. D., Hansen, T. T., Walth, G. L., 2019 *The Physical Origins of the Identified and Still Missing Components of the Warm-Hot Intergalactic Medium: Insights from Deep Surveys in the Field of Blazar 1ES1553+113*, ApJ Letters, 884, 2, L31

11. Chen, H.-W., **Johnson, S. D.**, Straka, L. A., Zahedy, F. S., Schaye, J., Muzahid, S., Bouché, N., Cantalupo, S., Marino, R., Wendt, M., 2019, *Characterizing circumgalactic gas around massive ellipticals at $z \approx 0.4$ III. The galactic environment of a chemically-pristine Lyman limit absorber*, MNRAS, 484, 1

10. **Johnson, S. D.**, Chen, H.-W., Straka, L. A., Schaye, J., Cantalupo, S., Wendt, M., Muzahid, S., Bouché, N., Herenz, E. C., Kollatchny, W., Mulchaey, J. S., Marino, R. A., Maseda, M. V., Wisotzki, L., 2018, *Galaxy and Quasar Fueling Caught in the Act from the Intragroup to the Interstellar Medium*, ApJ Letters, 869, L1

9. **Johnson, S. D.**, Chen, H.-W., & Mulchaey, J. S., Schaye, J., Straka, L. A. 2017, *The extent of chemically enriched gas around star-forming dwarf galaxies*, ApJ Letters, 850, L10

8. Chen, H.-W., **Johnson, S. D.**, Zahedy, F. S., Rauch, M., & Mulchaey, J. S. 2017, *Gauging Metallicity of Diffuse Gas under an Uncertain Ionizing Radiation Field*, ApJ Letters, 842L, 19C

7. Straka, L. A., **Johnson, S. D.**, York, D. G., Bowen, D. V., Florian, M., Kulkarni, V. P., Lundgren, B., Peroux, C. 2016, *Magellan LDSS3 emission confirmation of galaxies hosting metal-rich Lyman-alpha absorption systems*, MNRAS, 458, 3760

6. **Johnson, S. D.**, Chen, H.-W., & Mulchaey, J. S. 2015, *On the origin of excess cool gas in quasar host halos*, MNRAS, 452, 2553

5. **Johnson, S. D.**, Chen, H.-W., & Mulchaey, J. S. 2015, *On the possible environmental effect in distributing heavy elements beyond individual gaseous halos*, MNRAS, 449, 3263

4. **Johnson, S. D.**, Chen, H.-W., Mulchaey, J. S., Tripp, T. M., Prochaska, J. X., & Werk, J. K. 2014, *Discovery of a transparent sightline at $\rho \lesssim$ 20 kpc from an interacting pair of galaxies*, MNRAS, 438, 3039

3. **Johnson, S. D.**, Chen, H.-W., & Mulchaey, J. S. 2013, *Probing the IGM-galaxy connection at $z < 0.5$ - II. New insights into the galaxy environments of O VI absorbers in PKS 0405−123*, MNRAS, 434, 1765

2. **Johnson, S. D.** & Moyer, E. J., 2012, *Feasibility of U.S. renewable portfolio standards under cost caps and case study for Illinois*, Energy Policy, 49, 449

1. Moyer, E. J., **Johnson, S. D.**, Goldberger, L., & Zhu, J., 2012, *Feasibility and Implications of the Michigan 2012 Proposal 3 for a 25% State Renewable Portfolio Standard*, RDCEP Policy Analysis Paper Series

CO-AUTHORED JOURNAL ARTICLES

57. Dutta, S., Muzahid, S., Schaye, J., **Johnson, S. D.**, Bouché, N. F., Augustin, R., Cantalupo, S., Chen, H.-W., Wendt, M., 2026 *MUSEQuBES: the column density, covering fraction, mass, and environmental dependence of cool H I gas around low-redshift galaxies*, MNRAS 545, 3

56. DePalma, D., Gupta, N., Chen, H.-W., Simcoe, R. A., et al., including **Johnson, S. D.**, 2025, *H I Properties of Field Galaxies at $z \approx 0.2 - 0.6$: Insights into Declining Cosmic Star Formation*, ApJ Letters, 993, L18

55. Ha, T., Rupke, D. S. N., et al., including **Johnson, S. D.**, 2025, *Deep Ultraviolet, Emission-line Imaging of the Makani Galactic Wind*, ApJ, 986, 87

54. *Li, J.-T., Yu, X., Mao, H., et al., including **Johnson, S. D.**, 2025, *Probing the He II re-Ionization ERa via Absorbing C IV Historical Yield (HIERACHY). II. Project Design, Current Status, and Examples of Initial Data Products*, ApJ, 985, 63

53. Dutta, S., Muzahid, S., Schaye, J., Bouché, N. F., Cantalupo, S., Chen, H-.W., **Johnson, S. D.**, 2025, *MUSEQuBES: The Column Density, Covering Fraction, and Mass of O VI-bearing Gas in and Around Low-redshift Galaxies*, ApJ, 985, 44

52. Zhang, H., Cai, Z., et al., including **Johnson, S. D.**, 2025, *MAMMOTH-Subaru. IV. Large Scale Structure and Clustering Analysis of Lyα Emitters and Lyα Blobs at $z = 2.2$–2.3*, ApJ, 981, 70

51. Dutta, S., Muzahid, S., Schaye, J., Cantalupo, S., Chen, H.-W., **Johnson, S. D.**, 2025, *MUSE-QuBES: The Kinematics of O VI-bearing Gas in and around Low-redshift Galaxies*, ApJ, 980, 264

50. Banerjee, E., Muzahid, S., Schaye, J., et al., including **Johnson, S. D.**, 2025, *MUSEQuBES: Connecting H I Absorption with Lyα Emitters at $z \approx 3.3$*, ApJ, 980, 2, 171

49. Liu, W., Veilleux, S., Sankar, S., Rupke, D., Zakamska, N., Wylezalek, D., Vayner, A., et al., including **Johnson, S. D.**, 2025, *First Results from the JWST Early Release Science Program Q3D: The Fast Outflow in a Red Quasar at $z = 0.44$*, ApJ, 980, 1, 31

48. Banerjee, E., Muzahid, S., Schaye, J., Cantalupo, S., **Johnson, S. D.**, 2025, *MUSEQuBES: Unveiling Cosmic Web Filaments at $z \approx 3.6$ through Dual Absorption and Emission Line Analysis*, ApJL, 979, 2, L32

47. Kumar, S., Chen, H.-W., Qu, Z., Chen, M. C., Zahedy, F. S., et al., including **Johnson, S. D.**, 2024, *On the Nature of the C IV-bearing Circumgalactic Medium at $z \sim 1$*, OJAp, 7, 94

46. Dutta, S., Muzahid, S., Schaye, J., Mishra, S., Chen, H.-W., **Johnson, S. D.**, Wisotzki, L., Cantalupo, S., 2024, *MUSEQuBES: mapping the distribution of neutral hydrogen around low-redshift galaxies*, MNRAS, 528, 3745

45. Luo, Y., Leauthaud, A., and Greene, J., et al., including **Johnson, S. D.**, 2024, *The Merian survey: design, construction, and characterization of a filter set optimized to find dwarf galaxies and measure their dark matter halo properties with weak lensing*, MNRAS, 530, 4

44. Li, M., Zhang, H., Cai, Z., et al., including **Johnson, S. D.**, 2024, *MAMMOTH-Subaru. II. Diverse Populations of Circumgalactic Lyα Nebulae at Cosmic Noon*, 2024, ApJS, 275, 27

43. Deka, P. P., Gupta, N., Chen, H. W., **Johnson, S. D.**, Noterdaeme, P., Combes, F., Boettcher, E., Balashev, S. A., Emig, K. L., Józsa, G. I. G., Kl ockner, H.-R., Krogager, J.-K., Momjian, E., Petitjean, P., Rudie, G. C., Wagenveld, J., Zahedy, F. S., 2024, *MALS discovery of a rare HI 21-cm absorber at $z \approx 1.35$. origin of the absorbing gas in powerful AGN*, A&A, 687, 50

42. Chen, M. C., Chen, H.-W., Rauch, M., Qu, Z., **Johnson, S. D.**, Schaye, J., Rudie, G. C. ; *Li, J. I-H., †Liu, Z., Zahedy, F. S., Cantalupo, S., Boettcher, E., 2024, *An ensemble study of turbulence in extended QSO nebulae at $z \approx 0.5 - 1$*, ApJ, 962, 98

41. Epinat, B., Contini, T., Mercier, W., Ciesla, L., Lemaux, B. C., **Johnson, S. D.**, Richard, J., Brinchmann, J., Boogaard, L. A., Carton, D., Michel-Dansac, L., Bacon, R., Krajnovic, D., Finley, H., Schroetter, I., Ventou, E., Abril-Melgarejo, V., Boselli, A., Bouché, N. F., Kollatschny, W., Kovac, K., Paalvast, M., Soucail, G., Urrutia, T., Weilbacher, P. M., 2024, *MAGIC: Muse gAlaxy Groups In Cosmos – A survey to probe the impact of environment on galaxy evolution over the last 8 Gyr*, A&A 683, A205

40. Qu, Z., Chen, H.-W., **Johnson, S. D.**, Rudie, G. C., , Zahedy, F. S., DePalma, D., Schaye, J., Boettcher, E., Cantalupo, S., Chen, M. C., Faucher-Giguére, C.-A., *Li, J. I.-H., Mulchaey, J. S., Petitjean, P., Rafelski, M., 2023, *The Cosmic Ultraviolet Baryon Survey (CUBS) - VI. Connecting physical properties of the cool circumgalactic medium to galaxies at $z \approx 1$*, MNRAS, 524, 512

39. Banerjee, E., Muzahid, S., Schaye, J., **Johnson, S. D.**, Cantalupo, S., 2023, *MUSEQuBES: the relation between Lyα emitters and CIV absorbers at $z \approx 3.3$*, MNRAS 524, 5148

38. Qu, Z., Chen, H.-W., Rudie, G. C., **Johnson, S. D.**, Zahedy, F. S., DePalma, D., Boettcher, E., Cantalupo, S., Chen, M. C., Cooksey, K. L., Faucher-Giguére, C.-A.,*Li, J. I.-H., Lopez, S., Schaye, J., Simcoe, R. A., 2023, *The Cosmic Ultraviolet Baryon Survey (CUBS) - VI. Connecting physical properties of the cool circumgalactic medium to galaxies at $z \approx 1$*, MNRAS, 524, 512

37. Veilleux, S.; Liu, W.; Vayner, A., et al., including Johnson, S. D., 2023, *First Results from the JWST Early Release Science Program Q3D: The Warm Ionized Gas Outflow in z 1.6 Quasar XID 2028 and Its Impact on the Host Galaxy*, ApJ, 953, 56

36. Berg., M. A., Lehner, N., Howk, J. C., et al., including Johnson, S.D., 2023, *The Bimodal Absorption System Imaging Campaign (BASIC). I. A Dual Population of Low-metallicity Absorbers at $z < 1$*, ApJ, 944, 1

35. Ni, Y. Q., Moon, D.-S., Drout, M. R., Polin, A., et al. including S. D. Johnson, 2023, *The Origin and Evolution of the Normal Type Ia SN 2018aoz with Infant-phase Reddening and Excess Emission*, ApJ 946, 1

34. Chen, M. C., Chen, H.-W., Rauch, M., Qu, Z., **Johnson, S. D.**,*Li, J. I., et al. 2023, *Empirical constraints on the turbulence in QSO host nebulae from velocity structure function measurements*, MNRAS, 518, 2354

33. Qu, Z., Chen, H.-W., Rudie, G. C., Zahedy, F. S., **Johnson, S. D.**, Boettcher, E., et al., 2022, *The Cosmic Ultraviolet Baryon Survey (CUBS) V: on the thermodynamic properties of the cool circumgalactic medium at $z \lesssim 1$*, MNRAS, 516, 4882

32. Wylezalek, D., Vayner, A., Rupke, D. S. N., et al. including Johnson, S. D. 2022, *First Results from the JWST Early Release Science Program Q3D: Turbulent Times in the Life of a z 3 Extremely Red Quasar Revealed by NIRSpec IFU*, ApJ Letters, 940, L7

31. Ni, Y. Q., Moon, D.-S., Drout, M. R., et al. including Johnson, S. D., 2022, *Infant-phase reddening by surface Fe-peak elements in a normal type Ia supernova*, Nature Astronomy, 6, 568

30. Boettcher, E.; Gupta, N.; Chen, H.-W.; Chen, M. C.; Józsa, G. I. G.; Rudie, G. C.; Cantalupo, S.; **Johnson, S. D.**; Balashev, S. A.; Comes, F.; Cooksey, K. L.; Faucher-Giguére, C.-A.; Krogager, J.-K.; Lopez, S.; Momjian, E.; Noterdaeme, P.; Petitjean, P.; Rafelski, M.; Srianand, R.; Walth, G.; Zahedy, S., 2022; *Discovery of a Damped Lyα absorber originating in a spectacular interacting dwarf galaxy pair at $z = 0.026$*, 2022, ApJ Letters, 926, L33

29. Pearl, A. N., Bezanson, R.; Zentner, A. R.; Newman, J. A.; Goulding, A. D.; Whitaker, K. E.; **Johnson, S. D.**; Greene, J. E., 2022, *CLIMBER: Galaxy-Halo Connection Constraints from Next-generation Surveys*, ApJ, 925, 180P

28. Muzahid, S.; Schaye, J.; Cantalupo, S.; Marino, R. A.; Bouché, N. F.; **Johnson, S. D.**; Maseda, M.; Wendt, M.; Wisotzki, L.; Zabl, J., 2021, *MUSEQuBES: characterizing the circumgalactic medium of redshift ≈ 3.3 Lyα emitters*, MNRAS, 508, 5612M

27. Cooper, T. J.; Rudie, G. C.; Chen, H.-W.; **Johnson, S. D.**; Zahedy, F. S.; Chen, M. C.; Boettcher, E.; Walth, G. L.; Cantalupo, S.; Cooksey, K. L.; Faucher-Giguére, C.-A.; Greene, J. E.; Lopez, S.; Mulchaey, J. S.; Penton, S. V.; Petitjean, P.; Putman, M. E.; Rafelski, M. ; Rauch, M.; Schaye, J.; Simcoe, R. A., 2021, *The Cosmic Ultraviolet Baryon Survey (CUBS) - IV. The complex multiphase circumgalactic medium as revealed by partial Lyman limit systems*, MNRAS, 508, 3

26. Zahedy, F. S.; Chen, H.-W.; Cooper, T. M.; Boettcher, E.; **Johnson, S. D.**; Rudie, G. C.; Chen, M. C.; Cantalupo, S,; Cooksey, K. L.; Faucher-Giguére, C.-A.; Greene, J. E. ; Lopez, S.; Mulchaey, J. S. ; Penton, S. V.; Petitjean, P.; Putman, M. E.; Rafelski, M.; Rauch, M.; Schaye, J.; Simcoe, R. A.; 2021, *The Cosmic Ultraviolet Baryon Survey (CUBS) - III. Physical properties and elemental abundances of Lyman-limit systems at $z < 1$*, MNRAS, 1, 887

25. Yu, X.; Li, J.-T.; Qu, Z.; Roederer, I. U.; Bregman, J. N.; Fan, X.; Fang, T.; **Johnson, S. D.**; Wang, F.; Yang, J.; 2021, *Probing the He II re-Ionization ERa via Absorbing C IV Historical Yield (HIERACHY) I: A strong outflow from a $z = 4.7$ quasar*, MNRAS, 505, 3, 4444

24. Narayanan, A.; Sameer; Muzahid, S.; **Johnson, S. D.**; Udhwani, P.; Charlton, J. C.; Mauerhofer, V. ; Schaye, J.; Yadav, M.; 2021, *A partial Lyman limit system tracing intragroup gas at $z \approx 0.8$ towards HE 1003+0149*, MNRAS, 505, 1, 738

23. Huang, Y. -H.; Chen, H.-W.; Shectman, S. A.; **Johnson, S. D.**; Zahedy, F. S.; Helsby, J. E.; Gauthier, J.-R.; Thompson, I. B., 2021, *A complete census of circumgalactic Mg II at redshift $z \lesssim 0.5$*, MNRAS, 502, 4, 4743

22. Boettcher, E.; Chen, H.-W.; Zahedy, F. S.; Cooper, T. J.; Johnson, S. D.; Rudie, G. C.; Chen, M. C.; et al., 2021, *The Cosmic Ultraviolet Baryon Survey (CUBS). II. Discovery of an H_2-bearing DLA in the Vicinity of an Early-type Galaxy at $z = 0.576$*, ApJ, 913, 1

21. Chen, H.-W.; Zahedy, F. S.; Boettcher, E.; Cooper, T. M.; **Johnson, S. D.**; Rudie, G. C.; Chen,

M. C.; Walth, G. L.; et al., 2020, *The Cosmic Ultraviolet Baryon Survey (CUBS) - I. Overview and the diverse environments of Lyman limit systems at $z < 1$* MNRAS, 497, 498

20. Sowgat, M., Joop, S., Marino, R. A., Cantalupo, S., Brinchmann, J., Contini, T., Wednt, M., Wisotzski, L., Zabl, J., Bouché, N., Akhlaghi, M., Chen, H.-W., Claeyssens, A., **Johnson, S. D.**, Leclergq, F., Maseda, M., Matthee, J., Richard, J., Urrutia, T., Verhamme, A., 2020 *MUSE-QuBES: Calibrating the redshifts of Lyman-α emitters using stacked circumgalactic medium absorption profiles*, MNRAS, 496, 1013

19. den Brok, J. S., Cantalupo, S., Mackenzie, R., Marino, R. A., Pezzulli, G., Matthee, J., Johnson, S. D., Krumpe, M., Urrutia, T., Kollatschny, W., 2020, *Probing the AGN unification model at redshift $z \sim 3$ with MUSE observations of giant Lyα nebulae*, MNRAS, 495, 1874

18. Kado-Fong, E., Greco, J. P., Beaton, R., Goulding, A., **Johnson, S. D.**, et al., 2020 *Star Formation in Isolated Dwarf Galaxies Hosting Tidal Debris: Extending the Dwarf-Dwarf Merger Sequence*, AJ, 159, 103

17. Caplar, N., Pena, T., **Johnson, S. D.**, Greene, J. E., 2020 *Nonstationarity of AGN variability: The only way to go is down!*, ApJ Letters, 889, 29

16. Halevi, G., Goulding, A., Greene, J., Coupon, J., Golob, A., Gwyn, S., **Johnson, S. D.**, Moutard, T., Sawicki, M., Suh, H., Toba, Y., 2019, *HSC-XD 52: An X-ray detected AGN in a low-mass galaxy at $z = 0.56$*, ApJ Letters 885, 1, L3

15. Gaspari, M., Eckert, D., Ettori, S., Tozzi, P., Bassini, L., Rasia, E., Brighenti, F., Sun, M., Borgani, S., **Johnson, S. D.**, Tremblay, G., Stone, J., Temi, P., Yang, H.-Y. K., Tombesi, F., Cappi, M., 2019, *The X-Ray Halo Scaling Relations of Supermassive Black Holes*, ApJ, 884, 2, 169

14. Marino, R. A., Cantalupo, S., Pezzulli, G., Lilly, S. J., Gallego, S., Mackenzie, R., Matthee, J., Brinchmann, J., Bouché, N., Feltre, A., Muzahid, S., Schroetter, I., **Johnson, S. D.**, Nanayakkara, T., 2019, *A Giant Lyα Nebula and a Small-scale Clumpy Outflow in the System of the Exotic Quasar J0952+0114 Unveiled by MUSE*, ApJ, 880, 47M

13. Chen, H.-W., Boettcher, E., **Johnson, S. D.**, et al. 2019, *A Giant Intragroup Nebula Hosting a Damped Lyα Absorber at $z = 0.313$*, ApJ Letters, 878, L33

12. Zahedy, F. S., Chen, H.-W., **Johnson, S. D.**; Pierce, R. M., Rauch, M., Huang, Y.-H., Weiner, B. D., Gauthier, J.-R., 2018, *Characterizing Circumgalactic Gas around Massive Ellipticals at $z \approx 0.4$ - II. Physical Properties and Elemental Abundances*, MNRAS, 484, 2

11. Schmidt, S. J., Shappee, B.-J., van Saders, J. L.; Stanek, K. Z., Brown, J. S.; Kochanek, C. S.; Dong, S.; Drout, M. R.; Frank, S; Holoien, T. W.-S.; **Johnson, S. D.**; Madore, B. F..; Prieto, J. L.; Seibert, M.; Seidel, M. K.; Simonian, G. V. A., *The largest M dwarfs flares from ASAS-SN*, ApJ, 876, 115S

10. Chen H.-W., Zahedy F. S., **Johnson S. D.**, Pierce R. M., Huang Y.-H., Weiner B. J., Gauthier J.-R., 2018, *Characterizing Circumgalactic Gas Around Massive Ellipticals at $z \approx 0.4$ - I. Initial results* MNRAS, 479, 2547C

9. Sun, A.-L., Greene, J. E., Zakamska, N. L., Goulding, A., Strauss, M. A., Huang, S., **Johnson, S.D.**, Kawaguchi, T., Matsuoka, Y., Marsteller, A. A., Nagao, T., Tobo, Y., et al. 2018, *Imaging extended emission-line regions of obscured AGN with the Subaru Hyper Suprime-Cam Survey*, MNRAS, 480, 2302S

8. Stern, J., Faucher-Gigére, C.-A., Hennawi, J. F., Hafen, Z., **Johnson, S. D.**, Fielding, D., 2018, *Does circumgalactic O VI trace low-pressure gas beyond the accretion shock? clues from H I absorption, dust extinction, and line kinematics*, ApJ, 865, 91S

7. Lan T.-W., Ménard B., Baron D., **Johnson S. D.**, Poznanski D., Prochaska J. X., O'Meara J. M., 2018, *On the limitations of statistical absorption studies with the Sloan Digital Sky Surveys I-III*, MNRAS, 477, 3520L

6. Goulding, A. D., Greene, J. E., Bezanson, R., Greco, J., **Johnson, S. D.**, Leauthaud, A, Matsuoka, Y., Medezinski, E., Price-Whelan, A.M., 2018, *Galaxy Interactions Trigger Rapid Black Hole Growth: an unprecedented view from the Hyper Suprime-Cam Survey*, PASJ, 70S, 37G

5. Huang, Y.-W., Chen, H.-W., **Johnson, S. D.**, Weiner, B. J., 2016, *Characterizing the Chemically-Enriched Circumgalactic Medium of* $\sim$ 38000 *Luminous Red Galaxies in SDSS DR12*, MNRAS, 455, 1713

4. Chen, H.-W., Gauthier, J.-R., Sharon, K., **Johnson, S. D.**, Nair, P., & Liang, C. J. 2014, *Spatially resolved velocity maps of halo gas around two intermediate-redshift galaxies*, MNRAS, 438, 1435

3. Oka, T., Welty, D. E., **Johnson, S. D.**, York, D. G., Dahlstrom, J., & Hobbs, L. M., 2013, *Anomalous Diffuse Interstellar Bands in the Spectrum of Herschel 36. II. Analysis of Radiatively Excited* CH^+*, CH, and Diffuse Interstellar Bands*, ApJ, 773, 42

2. Dahlstrom, J., York, D. G., Welty, D. E., Oka, T., Hobbs, L. M., **Johnson, S. D.**, Friedman, S. D., Jiang, Z., Rachford, B. L., Sherman, R., Snow, T. P., Sonnentrucker, P., 2013, *Anomalous Diffuse Interstellar Bands in the Spectrum of Herschel 36. I. Observations of Rotationally Excited CH and* CH^+ *Absorption and Strong, Extended Redward Wings on Several DIBs*, ApJ, 773, 41

1. York, D. G., Straka, L. A., Bishof, M., Kuttruff, S., Bowen, D., Kulkarni, V. P., Subbarau, M., Richards, G., Vanden Berk, D., Hall, P. B., Heckman, T., Khare, P., Quashnock, J., Ghering, L., & **Johnson, S. D.**, *Galaxies with background QSOs - I. A search for strong galactic H*α *lines* 2012, MNRAS, 423, 3692