Curriculum Vitae

Benny Trakhtenbrot

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CONTACT INFORMATION

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POSITIONS

Current: **Tel Aviv University**, Tel Aviv, Israel:
Associate Professor (with tenure), 2023 – present
Senior Lecturer (equivalent to Assistant Prof. in the US), 2018–2022

ETH Zurich, Switzerland:
Zwicky prize postdoctoral fellow in astrophysics, 2013–2018

Weizmann Institute of Science, Rehovot, Israel:
Benoziyo prize postdoctoral fellow in astrophysics, 2012–2013

RESEARCH INTERESTS

Supermassive Black Holes - formation, evolution and links to host galaxies; Active Galactic Nuclei - structure and accretion; extragalactic and high-redshift surveys.

EDUCATION

Tel Aviv University

Ph.D. in Physics and Astronomy, 2013

- Thesis title: "The Observed Cosmic Evolution of Black Hole Mass and Accretion Rate in Active Galactic Nuclei"
- Advisor: Hagai Netzer

B.Sc. in Physics and Computer Science, Cum Laude, 2006

SCHOLARSHIPS, HONORS AND AWARDS

Rector's list of top lecturers (top ∼2%), Tel Aviv University, 2022

The School of Physics and Astronomy award for excellence in teaching, 2021

The Zwicky prize postdoctoral fellowship in astrophysics, ETH Zurich, 2013–2018

The Benoziyo prize fellowship in astrophysics, Weizmann Institute of Science, 2012

The Yuval Neeman award for outstanding academic achievement, awarded by the Tel Aviv University, 2011

The Ilan Ramon award for academic excellence and public outreach activity, awarded by the Commercial & Industrial Club, 2010

The School of Physics and Astronomy award for outstanding achievements in public outreach, awarded by the Tel Aviv University, 2010

The Dan David Scholarship for graduate students, awarded by the Dan David Foundation and the prize laureates, 2009

The School of Physics and Astronomy award for outstanding achievements in research, and in public outreach, awarded by the Tel Aviv University, 2008

PUBLICATIONS SUMMARY

I took part in over 120 papers published in peer-reviewed journals, with a total of over 6,800 citations (11 first-author papers with over 800 citations; source: NASA ADS).

TEACHING EXPERIENCE

Lecturer in various (astro)physics courses, Tel Aviv University, since 2019:

- *Classical Mechanics / Physics 1* - 1st year engineering undergraduate students
- *Observational Techniques* - (astro)physics graduate students

Guest Lecturer in graduate-level astrophysics courses, ETH Zurich, 2014-2016

Teaching Assistant in undergrad physics laboratories, Tel Aviv University, 2008-2012

GRANTS

- **ERC** - European Research Council, Starting Grant, 2021-2026: 1,684,750 Euro
- **ISF** - Israel Science Foundation, Personal Grant, 2019-2023: 914,000 NIS ($\sim$ \$283,000)

OBSERVATIONAL EXPERIENCE

Extensive experience in optical/near-IR and sub-mm observations of extragalactic sources. Led succesful proposals on:

- **Hubble Space Telescope**, 2017-2018 (cycle-25): 12 orbits with WFC3/IR
- **Very Large Telescope (VLT)**, Chile, 2008—present: >400 hours with the X-Shooter and SINFONI instruments
- **Atacama Large Millimeter Array (ALMA)**, Chile, 2014–2017: $\sim$23 hours
- **Keck Telescope**, Hawaii, 2014–2015: 6 nights with the MOSFIRE instrument
- **Plateau de Bure Interferometer**, France, 2014–2015: 5.5 hours
- **Gemini North**, Hawaii, 2007–2012: $\sim$70 hours with the NIRI instrument
- **Gemini South**, Chile, 2006: $\sim$20 hours with the GNIRS instrument

CO-I on proposals accepted for observations with the *James Webb* (Cycle 1, 2021), *Hubble*, *Herschel*, *Chandra*, *XMM-Newton*, *NICER*, *Swift*, and *Spitzer* space observatories.

Extensive experience with analysis of spectroscopic data from large extragalactic surveys, including SDSS, 2QZ, 2SLAQ and zCOSMOS.

SUPERVISION & MENTORING

Relevant publications are highlighted in the List of Publications (below)

- **Formal supervision of students & postdocs at Tel Aviv University:**
  Marzena Śniegowska, Postdoc (TAU, 2022 – present)
  Lydia Makrygianni, Postdoc (TAU, 2020–2023)
  Grisha Zeltyn, PhD thesis (TAU, 2021–present)
  Shir Aviram, MSc thesis (TAU, 2022 – present)
  Tamir Cohen, MSc thesis (TAU, 2022 – present)
  Aviya Zoref, MSc thesis (TAU, 2022 – present)
  Tomer Reiss, MSc thesis (TAU, 2019–2023)
  Grisha Zeltyn, MSc thesis (TAU, 2019–2021)
- **Project-oriented mentorship of students & postdocs in other institutions:**
  Tonima Ananna, postdoc project (Dartmouth College, 2020–2022)
  Julián Mejía-Restrepo, postdoc project (ESO Santiago, 2018–2022)
  Anna Weigel, PhD project (ETH Zurich, 2017–2018)
  Lia Sartori, PhD project (ETH Zurich, 2017–2018)
  Jakob den Brok, MSc thesis (ETH Zurich, 2018–2019)
  Quentin Pognan, MSc thesis (ETH Zurich, 2017–2019)
  Julián Mejía-Restrepo, PhD project (U. Chile, 2014–2018)
  Caroline Bertemes, MSc thesis (ETH Zurich, 2014–2016)
  Natalia Engler, MSc thesis (ETH Zurich, 2014)

MAJOR SCIENTIFIC COLLABORATIONS

- **BAT AGN Spectroscopic Survey (BASS) – co-founder and co-leader** (2014–present): 50+ members, 100s of hours on advanced telescopes, 30+ papers.
- **Sloan Digital Sky Survey V (SDSS-V)** – member (2018–present):
  Co-chair of a scientific Working Group & member of the Collaboration Council.

Other Community Involvement & Service

- **Science Working Groups:**
  The ULTRASAT mission, **chair** of the AGN WG (2020–present)
  The COSMOS-Web survey, member of the AGN WG (2021–present)
  The Athena X-ray Observatory, member in two WGs (2016–present)
  The Lynx X-ray Observatory Science and Technology Definition Team, member in two WGs (2016-2020)
- **Panel member:** Israel Science Foundation; ESO Observing Programmes Committee; Chandra X-ray Observatory Time Allocation Committee.
- **External reviewer:** expert reviews for panels evaluating applications for the Hubble Space Telescope, and for the European Research Council (ERC).
- **Referee:** for *Nature*, *Science*, *The Astrophysical Journal* (inc. *Letters*), *Monthly Notices of the Royal Astronomical Society*, *Astronomy & Astrophysics*, and *Publications of the Astronomical Society of Japan*
- **SOC member:** "Local hard X-ray selected AGN across the multi-wavelength spectrum" (Santiago, Chile, 2018); "Are AGN Special?" (Durham, UK, 2018), "Young Astronomers on Galactic Nuclei" (Budhapest, Hungary, 2018); Co-chair of the Symposium "The many faces of accreting black holes" (within the EAS 2021 meeting, Leiden/virtual); "What drives the growth of black holes: a decade of reflection" (Reykjavik, Iceland, 2022); SDSS-V Collaboration Meeting (New York City, USA, 2023).
- **LOC member:** the Inaugural Zwicky Symposium - "Confronting Ideas on Galactic Metamorphoses" (Braunwald, Switzerland, 2015)

Conference Presentations (Selected)

"The Restless Nature of AGN: 10 Years Later", Napoli, Italy, June 2023 (talk)

"Getting Ready To Descend The Slippery Slope Of Multimessanger Cosmological Black Holes Data", Sesto, Italy, Jan. 2023 – **invited participant**, and talk

SDSS-V Collaboration Meeting, virtual, Aug. 2021 – **invited plenary talk**

"The Many Faces of Black Hole Accretion" symposium (within the EAS 2021 meeting), Leiden/virtual, July 2021 – **co-chair**

"Gaia Science Alerts Workshop", virtual, Jan. 2021 – talk

"IAU Symp. 356: Nuclear Activity in Galaxies Across Cosmic Time", Addis Ababa, Ethiopia, Oct. 2019 – **invited review talk** and session chair

"Quasars in Crisis", Edinburgh, UK, Aug. 2019 – talk

The 64th Annual Meeting of the Israel Physical Society, Jerusalem, Israel, Dec. 2018 –**invited review talk**

"Are AGN Special?", Durham, UK, Aug. 2018 – talk

"Massive black holes in evolving galaxies", Paris, France, July 2018 – talk

"AGN X-ray Surveys: Soft to Hard and Deep to Wide" (within the COSPAR General Assembly), Pasadena, CA, July 2018 – **invited review talk**

"Local hard X-ray selected AGN across the multi-wavelength spectrum", Santiago, Chile, Feb. 2018 – talk

The 231th Meeting of the AAS, National Harbor, MD, Jan. 2018 – 2 talks

"INTEGRAL Symposium 2017", Venice, Italy, Oct. 2017 – **invited talk**

"From *Chandra* to *Lynx*", Cambridge, MA, Aug. 2017 – **invited talk**

2017 Santa Cruz Galaxy Workshop, Santa Cruz, CA, Aug. 2017 – talk

"SMG20 - Twenty years of Submillimetre Galaxies", Durham, UK, Aug. 2017 – talk

"Unravelling the first billion years with next-generation observatories and modelling"

special session (within the EWASS meeting), Prague, Czech Republic, June 2017 – talk

"Elusive AGN in the Next Era", Fairfax, VA, June 2017 – **invited talk**

"Quasars at All Cosmic Epochs", Padova, Italy, Apr. 2017 – talk

"Breaking the Limits: Super-Eddington Accretion on Compact Objects", Arbatax, Italy, Sept. 2016 – talk

"Emergence, Evolution and Effects of Black Holes in the Universe: The Next 50 Years of Black Hole Physics", Aspen, CO, June-July 2016 – **invited participant**

"Computing the Universe: At the Intersection of Computer Science and Cosmology", Oaxaca, Mexico, June 2016 **invited talk**

"X-ray View of Black Hole Activity in the Local Universe", Zurich, Switzerland, Feb. 2016 – talk

The 227th Meeting of the AAS, Kissimmee, FL, Jan. 2016 – talk

"Inaugural Zwicky Symposium: Confronting Ideas on Galactic Metamorphoses", Braunwald, Switzerland, Sept. 2015 – **invited talk**

"Unveiling the AGN-Galaxy Evolution Connection", Puerto Varas, Chile, Mar. 2015 – talk

"AGN Reverberation: Present and Future", Beijing, China, Oct. 2013 – **invited talk**

"Massive Black Holes: Birth, Growth and Impact", Santa Barbara, CA, Aug. 2013 – talk

2013 COSMOS Team Meeting, Kyoto, Japan, May 2013 – talk

The 221st Meeting of the AAS, Long Beach, CA, Jan. 2013 – talk

COLLOQUIA & SEMINARS (SELECTED)

Univesity of Sheffield, Astrophysics seminar, May 2023
Hebrew University Jerusalem, Astrophysics seminar, Mar. 2022
University of Groningen, Papteyn Institute Colloquium, Mar. 2022
University of Florida, Astronomy seminar, Nov. 2021
Technion, Astronomy seminar, Apr. 2021
Ben Gurion University, Astrophysics and Cosmology seminar, Nov. 2020
University of Michigan, Astronomy Colloquium, Feb. 2018
Hebrew University Jerusalem, Astrophysics seminar, Dec. 2017
Technion, Astrophysics seminar, Dec. 2017
Weizmann Institute of Science, Astrophysics seminar, Dec. 2017
Tel Aviv University, Physics Colloquium, Dec. 2016
Hebrew University Jerusalem, Astrophysics seminar, Dec. 2016
Technion, Astrophysics seminar, Dec. 2016
Weizmann Institute of Science, Astrophysics seminar, Dec. 2016
Yale Center for Astronomy and Astrophysics seminar, Dec. 2015
Caltech tea talk, Dec. 2015
UC Berkeley, Cosmology seminar, Dec. 2015
Tel Aviv University, Astronomy seminar, Dec. 2015
Kavli IPMU Tokyo, Oct. 2014
ETH Zurich, Institute for Astronomy research seminar, May 2014
University of California, Irvine, Astrophysics seminar, Feb. 2015
University of California, Los Angeles, Astrophysics Colloquium, Feb. 2015

PUBLIC OUTREACH ACTIVITY

Tel Aviv University Astronomy Club ("TAU AstroClub"): organizing monthly public lectures, observatory "open house" evenings, and other outreach activities (co-organizer).

Astronomy on Tap Tel Aviv: short public talks about the universe, over beer (co-host).

List of Publications

- I took part in over 120 papers published in peer-reviewed journals, with a total of over 6,800 citations (11 first-author papers with over 800 citations; source: NASA ADS).
- The list below is split to "major contributions" and "other refereed publications", based on my direct contribution to each paper, and these sections are sorted in reverse chronological order.
- As a co-founder of the BASS project, I took part in over 35 BASS papers (totalling over 1,900 citations). These papers are also split according to my direct contribution.
- The list below is sorted in revererse chronological order, with **names of supervised students and postdocs underlined.**

REFEREED PUBLICATIONS

Major Contributions

43. Ricci C., **Trakhtenbrot B.**, 2023
"*Changing-look Active Galactic Nuclei*" (**invited review**),
Nature Astronomy, in presss, arXiv:2211.05132

42. Thomas M. O., Shemmer O., **Trakhtenbrot B.**, et al., 2023
"*Searching for the Role of Mergers in Fast and Early SMBH Growth: Morphological Decomposition of Quasars and Their Hosts at* $z \sim 4.8$",
The Astrophysical Journal, 955, 15

41. Makrygianni L., **Trakhtenbrot B.**, Arcavi I., et al., 2023
"*AT 2021loi: A Bowen Fluorescence Flare with a Rebrightening Episode Occurring in a Previously Known AGN*",
The Astrophysical Journal, 953, 32

40. Zeltyn G., **Trakhtenbrot B.**, Eracleous M., et al., 2022
"*A Transient "Changing-look" Active Galactic Nucleus Resolved on Month Timescales from First-year Sloan Digital Sky Survey V Data*",
The Astrophysical Journal Letters, 939, L16

39. Ananna T. T., Weigel A. K., **Trakhtenbrot B.**, et al., 2022
"*BASS. XXX. Distribution Functions of DR2 Eddington Ratios, Black Hole Masses, and X-Ray Luminosities*",
The Astrophysical Journal Supplement Series, 261, 9

38. den Brok J. S., Koss M. J., **Trakhtenbrot B.**, et al., 2022
"*BASS. XXVIII. Near-infrared Data Release 2: High-ionization and Broad Lines in Active Galactic Nuclei*",
The Astrophysical Journal Supplement Series, 261, 7

37. Koss M. J., **Trakhtenbrot B.**, Ricci C., et al., 2022
"*BASS. XXVI. DR2 Host Galaxy Stellar Velocity Dispersions*",
The Astrophysical Journal Supplement Series, 261, 6

36. Mejía-Restrepo J. E., **Trakhtenbrot B.**, Koss M. J., et al., 2022
"*BASS. XXV. DR2 Broad-line-based Black Hole Mass Estimates and Biases from Obscuration*",
The Astrophysical Journal Supplement Series, 261, 5

35. Koss M. J., Ricci C., **Trakhtenbrot B.**, et al., 2022
"*BASS. XXII. The BASS DR2 AGN Catalog and Data*",
The Astrophysical Journal Supplement Series, 261, 2

34. Koss M. J., **Trakhtenbrot B.**, Ricci C., et al., 2022
"*BASS. XXI. The Data Release 2 Overview*",
The Astrophysical Journal Supplement Series, 261, 1

33. Zeltyn G., **Trakhtenbrot B.**, 2022
"*The Contribution of AGN Accretion Disks to Hydrogen Reionization*",
The Astrophysical Journal, 929, 21

32. Chaves-Montero J., Bonoli S., **Trakhtenbrot B.**, et al., 2022
"*Black hole virial masses from single-epoch photometry. The miniJPAS test case*",
Astronomy and Astrophysics, 660, A95

31. Nguyen N. H., Lira P., **Trakhtenbrot B.**, et al., 2020
"*ALMA Observations of Quasar Host Galaxies at* $z \simeq 4.8$",
The Astrophysical Journal, 895, 74

30. Pognan Q., **Trakhtenbrot B.**, Sbarrato T., et al., 2020,
"*Searching for Super-Eddington Quasars using a Photon Trapping Accretion Disc Model*",
Monthly Notices of the Royal Astronomical Society, 492, 4058

29. Suh H., Civano F., **Trakhtenbrot B.**, et al., 2020
"*No Significant Evolution of Relations between Black Hole Mass and Galaxy Total Stellar Mass Up to* $z \sim 2.5$",
The Astrophysical Journal, 889, 32

28. Bär R. E., **Trakhtenbrot B.**, Oh K., et al., 2019,
"*BAT AGN Spectroscopic Survey - XIII. The nature of the most luminous obscured AGN in the low-redshift universe*",
Monthly Notices of the Royal Astronomical Society, 489, 3073

27. Sartori L. F., **Trakhtenbrot B.**, Schawinski K., et al., 2019,
"*A Forward Modeling Approach to AGN Variability–Method Description and Early Applications*",
The Astrophysical Journal, 883, 139

26. **Trakhtenbrot B.**, Arcavi I., MacLeod C. L., et al., 2019,
"*1ES 1927+654: An AGN Caught Changing Look on a Timescale of Months*",
The Astrophysical Journal, 883, 94

25. **Trakhtenbrot B.**, Arcavi I., Ricci C., et al., 2019
"*A new class of flares from accreting supermassive black holes*",
Nature Astronomy, 3, 242

↓ *Papers published prior to my appointment as a TAU faculty member:* ↓

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24. Caplar N., Lilly S. J., **Trakhtenbrot B.**, 2018
"*AGN evolution from galaxy evolution viewpoint - II*",
The Astrophysical Journal, 867, 148

23. Mejía-Restrepo J. E., **Trakhtenbrot B.**, Lira P., et al., 2018
"*Can we improve C* IV*-based single-epoch black hole mass estimations?*",
Monthly Notices of the Royal Astronomical Society, 478, 1929

22. Ricci C., **Trakhtenbrot B.**, Koss M. J., et al., 2017
"*BAT AGN Spectroscopic Survey. V. X-Ray Properties of the Swift/BAT 70-month AGN Catalog*",
The Astrophysical Journal Supplement Series, 233, 17

21. Koss M. J., **Trakhtenbrot B.**, Ricci C., et al., 2017
"*BAT AGN Spectroscopic Survey. I. Spectral Measurements, Derived Quantities, and AGN Demographics*",
The Astrophysical Journal, 850, 74

20. Ricci C., **Trakhtenbrot B.**, Koss M. J., et al., 2017
"*The close environments of accreting massive black holes are shaped by radiative feedback*",
Nature, 549, 488

19. **Trakhtenbrot B.**, Ricci C., Koss M. J., et al., 2017
"*BAT AGN Spectroscopic Survey (BASS) - VI. The* Γ_X*-*L/L_{Edd} *relation*",
Monthly Notices of the Royal Astronomical Society, 470, 800

18. **Trakhtenbrot B.**, Volonteri M., Natarajan P., 2017
"*On the Accretion Rates and Radiative Efficiencies of the Highest-redshift Quasars*",
The Astrophysical Journal Letters, 836, L1

17. **Trakhtenbrot B.**, Lira P., Netzer H., et al., 2017
"*ALMA Observations Show Major Mergers Among the Host Galaxies of Fast-growing, High-redshift Supermassive Black Holes*",
The Astrophysical Journal, 836, 8

16. Caplar N., Lilly S. J., **Trakhtenbrot B.**, 2017
"*Optical Variability of AGNs in the PTF/iPTF Survey*",
The Astrophysical Journal, 834, 111

15. Bertemes C., **Trakhtenbrot B.**, Schawinski K., et al., 2016
"*Testing the completeness of the SDSS colour selection for ultramassive, slowly spinning black holes*",
Monthly Notices of the Royal Astronomical Society, 463, 4041

14. Mejía-Restrepo J. E., **Trakhtenbrot B.**, Lira P., et al., 2016
"*Active galactic nuclei at* $z\sim1.5$ *- II. Black hole mass estimation by means of broad emission lines*",
Monthly Notices of the Royal Astronomical Society, 460, 187

13. **Trakhtenbrot B.**, Civano F., Urry C. M., et al., 2016
"*Faint COSMOS AGNs at* $z\simeq3.3$*. I. Black Hole Properties and Constraints on Early Black Hole Growth*",
The Astrophysical Journal, 825, 4

12. Caplar N., Lilly S. J., **Trakhtenbrot B.**, 2015
"*AGN Evolution from a Galaxy Evolution Viewpoint*",
The Astrophysical Journal, 811, 148

11. **Trakhtenbrot B.**, Urry C. M., Civano F., et al., 2015
"*An over-massive black hole in a typical star-forming galaxy, 2 billion years after the Big Bang*",
Science, 349, 168

10. **Trakhtenbrot B.**, 2014
"*The Most Massive Active Black Holes at* $z\sim1.5-3.5$ *have High Spins and Radiative Efficiencies*",
The Astrophysical Journal Letters, 789, L9

9. Netzer H., **Trakhtenbrot B.**, 2014
"*Bolometric luminosity black hole growth time and slim accretion discs in active galactic nuclei*",
Monthly Notices of the Royal Astronomical Society, 438, 672

8. Rosario D. J., **Trakhtenbrot B.**, Lutz D., et al., 2013
"*The mean star-forming properties of QSO host galaxies*",
Astronomy and Astrophysics, 560, A72

7. **Trakhtenbrot B.**, Netzer H., 2012
"*Black hole growth to z=2 - I. Improved virial methods for measuring $M_{\rm BH}$ and $L/L_{\rm Edd}$*",
Monthly Notices of the Royal Astronomical Society, 427, 3081

6. Mor R., **Trakhtenbrot B.**, 2011
"*Hot-dust Clouds with Pure-graphite Composition around type-I Active Galactic Nuclei*",
The Astrophysical Journal Letters, 737, L36

5. **Trakhtenbrot B.**, Netzer H., Lira P., et al., 2011
"*Black Hole Mass and Growth Rate at $z\simeq$4.8: A Short Episode of Fast Growth Followed by Short Duty Cycle Activity*",
The Astrophysical Journal, 730, 7

4. Shemmer O., **Trakhtenbrot B.**, Anderson S. F., et al., 2010
"*Weak Line Quasars at High Redshift: Extremely High Accretion Rates or Anemic Broad-line Regions?*",
The Astrophysical Journal, 722, L152

3. **Trakhtenbrot B.**, Netzer H., 2010
"*The evolution of $M_*/M_{\rm BH}$ between z=2 and z=0*",
Monthly Notices of the Royal Astronomical Society, 406, L35

2. Netzer H., Lira P., **Trakhtenbrot B.**, et al., 2007
"*Black Hole Mass and Growth Rate at High Redshift*",
The Astrophysical Journal, 671, 1256

1. Netzer H., **Trakhtenbrot B.**, 2007
"*Cosmic Evolution of Mass Accretion Rate and Metallicity in Active Galactic Nuclei*",
The Astrophysical Journal, 654, 754

Other Refereed Publications

82. Auge C., Sanders D., Treister E., et al., 2023
"*The Accretion History of AGN: The Spectral Energy Distributions of X-Ray-luminous Active Galactic Nuclei*",
The Astrophysical Journal, 957, 19

81. Caglar T., Koss M. J., Burtscher L., et al., 2023
"*BASS. XXXV. The M_{BH}-σ* Relation of 105 Month Swift-BAT Type 1 AGNs*",
The Astrophysical Journal, 956, 60

80. Tortosa A., Ricci C., Arévalo P., et al., 2023
"*BASS-XL: X-ray variability properties of unobscured active galactic nuclei*",
Monthly Notices of the Royal Astronomical Society, 526, 1687

79. Ding X., Onoue M., Silverman J. D., et al., 2023
"*Detection of stellar light from quasar host galaxies at redshifts above 6*",
Nature, 621, 51

78. Casey C. M., Kartaltepe J. S., Drakos N. E., et al., 2023
"*COSMOS-Web: An Overview of the JWST Cosmic Origins Survey*",
The Astrophysical Journal, 954, 31

77. Almeida A., Anderson S. F., Argudo-Fernández M., et al., 2023
"*The Eighteenth Data Release of the Sloan Digital Sky Surveys: Targeting and First Spectra from SDSS-V*",
The Astrophysical Journal Supplement Series, 267, 44

76. Ricci C., Chang C.-S., Kawamuro T., et al., 2023
"*A Tight Correlation between Millimeter and X-Ray Emission in Accreting Massive Black Holes from $\lesssim$100 mas Resolution ALMA Observations*",
The Astrophysical Journal Letters, 952, L28

75. Silverman J. D., Mainieri V., Ding X., et al., 2023
"*Resolving Galactic-scale Obscuration of X-Ray AGNs at $z \gtrsim 1$ with COSMOS-Web*",
The Astrophysical Journal Letters, 951, L41

74. Yang J., Wang F., Fan X., et al., 2023
"*A SPectroscopic Survey of Biased Halos in the Reionization Era (ASPIRE): A First Look at the Rest-frame Optical Spectra of $z > 6.5$ Quasars Using JWST*",
The Astrophysical Journal Letters, 951, L5

73. Wang F., Yang J., Hennawi J. F., et al., 2023
"*A SPectroscopic Survey of Biased Halos in the Reionization Era (ASPIRE): JWST Reveals a Filamentary Structure around a $z = 6.61$ Quasar*",
The Astrophysical Journal Letters, 951, L4

72. Ha T., Dix C., Matthews B. M., et al., 2023
"*Shedding New Light on Weak Emission-line Quasars in the C IV-Hβ Parameter Space*",
The Astrophysical Journal, 950, 97

71. Fries L. B., Trump J. R., Davis M. C., et al., 2023
"*The SDSS-V Black Hole Mapper Reverberation Mapping Project: Unusual Broad-line Variability in a Luminous Quasar*",
The Astrophysical Journal, 948, 5

70. Armah M., Riffel R., Dors O. L., et al., 2023
"*Oxygen abundances in the narrow line regions of Seyfert galaxies and the metallicity-luminosity relation*",
Monthly Notices of the Royal Astronomical Society, 520, 1687

69. Koss M. J., Treister E., Kakkad D., et al., 2023
"*UGC 4211: A Confirmed Dual Active Galactic Nucleus in the Local Universe at 230 pc Nuclear Separation*",
The Astrophysical Journal Letters, 942, L24

68. Farina E. P., Schindler J.-T., Walter F., et al., 2022
"*The X-shooter/ALMA Sample of Quasars in the Epoch of Reionization. II. Black Hole Masses, Eddington Ratios, and the Formation of the First Quasars*",
The Astrophysical Journal, 941, 106

67. Temple M. J., Ricci C., Koss M. J., et al., 2023
"*BASS XXXIX: Swift-BAT AGN with changing-look optical spectra*",
Monthly Notices of the Royal Astronomical Society, 518, 2938

66. Marcotulli L., Ajello M., Urry C. M., et al., 2022
"*BASS. XXXIII. Swift-BAT Blazars and Their Jets through Cosmic Time*",
The Astrophysical Journal, 940, 77

65. Ananna T. T., Urry C. M., Ricci C., et al., 2022
"*Probing the Structure and Evolution of BASS Active Galactic Nuclei through Eddington Ratios*",
The Astrophysical Journal Letters, 939, L13

64. Kawamuro T., Ricci C., Imanishi M., et al., 2022
"*BASS XXXII: Studying the Nuclear Millimeter-wave Continuum Emission of AGNs with ALMA at Scales $\lesssim$100-200 pc*",
The Astrophysical Journal, 938, 87

63. Powell M. C., Allen S. W., Caglar T., et al., 2022
"*BASS. XXXVI. Constraining the Local Supermassive Black Hole-Halo Connection with BASS DR2 AGNs*",
The Astrophysical Journal, 938, 77

62. Ricci C., Ananna T. T., Temple M. J., et al., 2022
"*BASS XXXVII: The Role of Radiative Feedback in the Growth and Obscuration Properties of Nearby Supermassive Black Holes*",
The Astrophysical Journal, 938, 67

61. Masterson M., Kara E., Ricci C., et al., 2022
"*Evolution of a Relativistic Outflow and X-Ray Corona in the Extreme Changing-look AGN 1ES 1927+654*",
The Astrophysical Journal, 934, 35

60. Ricci F., Treister E., Bauer F. E., et al., 2022
"*BASS. XXIX. The Near-infrared View of the Broad-line Region (BLR): The Effects of Obscuration in BLR Characterization*",
The Astrophysical Journal Supplement Series, 261, 8

59. Oh K., Koss M. J., Ueda Y., et al., 2022
"*BASS. XXIV. The BASS DR2 Spectroscopic Line Measurements and AGN Demographics*",
The Astrophysical Journal Supplement Series, 261, 4

58. Pfeifle R. W., Ricci C., Boorman P. G., et al., 2022
"*BASS. XXIII. A New Mid-infrared Diagnostic for Absorption in Active Galactic Nuclei*",
The Astrophysical Journal Supplement Series, 261, 3

57. Li R., Ho L. C., Ricci C., et al., 2022
"*The Host Galaxy and Rapidly Evolving Broad-line Region in the Changing-look Active Galactic Nucleus 1ES 1927+654*",
The Astrophysical Journal, 933, 70

56. Kakkad D., Sani E., Rojas A. F., et al., 2022
"*BASS XXXI: Outflow scaling relations in low redshift X-ray AGN host galaxies with MUSE*",
Monthly Notices of the Royal Astronomical Society, 511, 2105

55. Gupta K. K., Ricci C., Tortosa A., et al., 2021
"*BAT AGN Spectroscopic Survey XXVII: scattered X-Ray radiation in obscured active galactic nuclei*",
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