

**CONTACT INFORMATION**

---

Dpt of Physics and Astronomy	Tel.: (410)516-6657;
Johns Hopkins University	e-mail: zakamska[at]jhu.edu
366 Bloomberg Center, 3400 N. Charles St.	
Baltimore MD 21218	<a href="http://zakamska.johnshopkins.edu">http://zakamska.johnshopkins.edu</a>

**APPOINTMENTS**

---

**Johns Hopkins University**, Baltimore, MD

Professor, Dept. of Physics and Astronomy, July 2021 - present  
Associate Professor, Dept. of Physics and Astronomy, July 2017 - June 2021  
Assistant Professor, Dept. of Physics and Astronomy, Aug 2010 - June 2017  
Between Aug 2010 and July 2011 on leave at:

**KIPAC (SLAC/Stanford University)**, Menlo Park, CA

Research Associate (Kavli Fellowship), Aug 2010 - July 2011

**Institute for Advanced Study**, Princeton, NJ

Long-term member (John N. Bahcall fellowship), Jan 2008 - July 2010  
Postdoctoral member (NASA Spitzer fellowship), Sept 2005 - Aug 2008

**EDUCATION**

---

**Princeton University**, Ph.D., Astrophysics, Aug 2001 - Sept 2005

Advisor: Michael A. Strauss

**Moscow Institute of Physics and Technology (MIPT)**

M.Sci. with honor, GPA=4.0/4.0, theoretical physics and astrophysics, Sept 1999 - June 2001

**Moscow Institute of Physics and Technology (MIPT)**

B.Sci. with honor, GPA=4.0/4.0, physics & mathematics, Sept 1995 - June 1999

**SELECTED AWARDS**

---

J. Robert Oppenheimer Visiting Professor (2021-2022; Institute for Advanced Study; additional funding provided by the Bershadsky Fund)  
Faculty Undergraduate Advising Award (2021; Johns Hopkins University; one award per year to a faculty member in School of Arts and Sciences)  
Scialog Fellow (2018; Research Corporation for Science Advancement and Heising-Simons Foundation)  
Catalyst Award (2016; Johns Hopkins University)  
D. Lunder and A. Ezekowitz Junior Visiting Professor (2016; Institute for Advanced Study)  
Newton Lacy Pierce Prize of the American Astronomical Society (2014)  
Alfred P. Sloan fellowship (2011-2013; national junior faculty fellowship)

Kavli postdoctoral fellowship (2010-2011; fellowship at Stanford University)  
John N. Bahcall long-term fellowship (2008-2010; fellowship at the Institute for Advanced Study)  
NASA Spitzer postdoctoral fellowship (2005-2008; national fellowship)  
NASA Hubble postdoctoral fellowship (2005, declined; national fellowship)  
Charlotte Elizabeth Procter Graduate Fellowship (2004-2005, Princeton University)  
Gold Medal of MIPT (awarded to 10 graduates of class of 500 people, 2001, MIPT)  
Presidential and other fellowships (1997-2000, MIPT)

## **RESEARCH GROUP AT JHU**

---

Andrey Vayner (2019 – present) – Postdoctoral researcher, Ph.D. from USCD in 2019, two papers  
Yuzo Ishikawa (2019 – present) – Ph.D. thesis student; one paper  
Brandon Stride (2020 – present) – undergraduate research advisee  
Andrew Liu (2021 – present) – undergraduate research advisee  
Closely collaborating with Center for Astrophysical Sciences (CAS) postdoc David Nataf

### **Previous members of the research group (if over two semesters or common papers)**

#### **Postdoctoral researchers and senior personnel**

Caroline Huang (2019 – 2020) – Postdoctoral researcher, Ph.D. from JHU in 2019 [now postdoc at Harvard / SAO]  
Rogemar Riffel (2019 – 2020) – sabbatical research scientist visiting from Brazil, multiple publications  
Ai-Lei Sun – postdoc (2017 – 2018) [now in commercial data science]; three refereed publications during her time at JHU  
Dominika Wylezalek – postdoc (2014 – 2017), Akbari-Mack Fellow (2015), Provost Fellow (2016) [now a group leader in U Heidelberg], five refereed publications, continuing collaboration  
Guilin Liu – postdoc (2011 – 2014) [now faculty at University of Science and Technology of China], three refereed publications  
Collaborated with CAS postdocs Kate Rowlands [now faculty at STScI], Jorge Barrera-Ballesteros [now faculty in Mexico], and Guangtun Zhu [now in finance]

#### **Graduate students:**

Hsiang-Chih Hwang (2016 – 2021) – fourteen refereed publications in collaboration during the Ph.D., five with Hwang as the first author [now postdoctoral fellow at the Institute for Advanced Study], continuing collaboration  
Kirsten Hall (2014 – 2020) – co-advised with T. Marriage, Ph.D. July 2020, two refereed publications, more in prep. [now SMA Fellow and Schmidt Fellow at Harvard]  
Zhicheng He (2017 – 2018) – visiting graduate student from USTC; one refereed publication [from 2020, in a faculty position in China]  
Rachael Alexandroff (2012 – 2017) – graduate student, Ph.D. July 2017 [after Ph.D., at the University of Toronto with the National Postdoctoral Fellowship of Canada; now data analyst for New York City Government], three chapters published  
Erini Lambrides (2015 – 2017) – graduate student on research rotation, one refereed publication  
Joseph Cleary (2013 - 2016) – undergraduate and graduate research rotations, 2016 Kerr Memorial Prize, co-author of two papers  
Carlos Anicetti (2019 – 2020), Qinan Wang (2018), Omnarayani Nayak (2012-2013), Mohammad Safarzadeh (2012-2013), Zhilei Xu (2012), Ting Su (2011) – students on rotation projects

#### **Undergraduate students:**

Gavin Fezenko (2020 – 2022) – undergraduate research advisee, one paper

Vedant Chandra (2018 – 2021) – undergraduate research advisee; three papers led by Chandra, more in prep. [now graduate student in Harvard], continuing collaboration

Evan Petrosky (2018 – 2021) – undergraduate research advisee, one paper published [now graduate student in UMich]

Ross Dempsey, undergraduate + Masters + post-Masters student, 2017 - 2019, two papers [2019 Kerr Memorial Prize; now graduate student in Princeton]

Sandy Yuan (spring 2016) – co-advised with M. Strauss in Princeton, one paper [now graduate student in Harvard]

Asa Stahl (2015 – 2017) – undergraduate research advisee, Provost’s Undergraduate Research Award [now graduate student at Rice]

Michael Kelly (2015 - 2016) – undergraduate research advisee (co-advised with D. Wylezalek), Provost’s Undergraduate Research Award, Master’s thesis, co-author of two papers based on his project [now at Applied Physics Laboratory]

Georges Obied (2014 - 2015) – undergraduate research advisee, Provost’s Undergraduate Research Award, two refereed publications, Master’s thesis, 2015 Kerr Memorial Prize [now graduate student at Harvard]

Kelly Lampayan (2013 - 2015) – undergraduate research advisee, Dean’s Undergraduate Research Award, one refereed publication, 2015 Kerr Memorial Prize [now at Applied Physics Laboratory]

Peranat Dayananda (2013 - 2015) – undergraduate research advisee [after graduation at AWR Lloyd Consulting, now graduate student in computer science at Brown]

Matthew Hill (2012 - 2014) – undergraduate research advisee, Provost’s and Dean’s Undergraduate Research Awards, one refereed publication [M.A. from Yale; now in public health management]

**Summer internships (unless already listed above):** <http://sites.krieger.jhu.edu/jhu-care/>

2020: Brandon Stride, Carsten Langholm, Devon Williams, Felix Yu, Gavin Fezenko, John Magardino, Kyle Schneider, Mansha Kapur, Matt Kleiman (co-advised by Vedant Chandra, Hsiang-Chih Hwang, David Nataf, Caroline Huang)

2019: Shuchen Zhang (primary supervisor: Hsiang-Chih Hwang).

2018: Katherine Xiang (primary supervisor: Dr. Nataf) [now graduate student at Harvard] – one paper

2017: Channa Luke, Anthony Flores [now graduate student at Stanford] (primary supervisor: Dr. Wylezalek), Wenzer Qin (primary supervisor: Dr. Nataf) [2019 Kerr Memorial Prize; 2019 APS Leroy Apker shortlist; now graduate student at MIT], Xuanyi Wu (primary supervisor: Dr. Rowlands) – two papers

Prior to JHU, supervised graduate students Xin Liu, Reinabelle Reyes, Laura Gómez and Joshua Green on pre-thesis projects (three refereed publications)

## TEACHING

---

JHU, Spring 2021, graduate (core): AS.171.603 Electromagnetic Theory, 20 students

JHU, Fall 2020, undergraduate: AS.171.201/207 Special Relativity / Waves, 45 students

JHU, Spring 2020, graduate (elective): AS.171.618 Observational Astronomy, 8 students plus informal audits

JHU, Fall 2019, graduate (core): AS.171.603 Electromagnetic Theory, 21 students

JHU, Spring 2018, graduate (core): AS.171.627 Astrophysical Dynamics, 8 students

JHU, Fall 2017, undergraduate: AS.171.201/207 Special Relativity / Waves, 24 students; published a laboratory for Special Relativity to American Journal of Physics: <https://aapt.scitation.org/doi/10.1119/1.5022796>

JHU, Spring 2017, graduate (core): AS.171.627 Astrophysical Dynamics, 11 students

JHU, Fall 2016, undergraduate: AS.171.201/207 Special Relativity / Waves, 28 students

JHU, Fall 2015, undergraduate: AS.171.201/207 Special Relativity / Waves, 30 students; textbook for Special Relativity: <http://arxiv.org/abs/1511.02121>

JHU, Fall 2014, undergraduate: AS.171.201/207 Special Relativity / Waves, 32 students

University of Copenhagen, Denmark, May 2014, graduate: From light to dark: the growing phase of supermassive black holes, co-taught with Sebastian Hoenig and Omer Blaes, 16 students

JHU, Fall 2013, undergraduate: AS.171.201/207 Special Relativity / Waves, 29 students

JHU, Spring 2013, graduate (core): AS.171.627 Astrophysical Dynamics, 8 students

JHU, Fall 2012, undergraduate: AS.171.201/207 Special Relativity / Waves; 35 students; developed a new laboratory component for the class

JHU, Spring 2012, graduate: AS.171.715 Galactic Structure and Stellar Dynamics, co-taught with Brice Menard, 12 students

JHU, Fall 2011, graduate: AS.171.618 Observational Astronomy, co-taught with Brice Menard, 10 students

Moscow 1995-2000: English as a foreign language; Physics, Mathematics, group classes and tutoring for high school students; up to 20 hours a week, 10 semesters, at MIPT Correspondence School and PhysTech College

#### **PROFESSIONAL SERVICE AND OUTREACH**

---

Referee for Science, Nature, Nature Astronomy, Cambridge University Press, A&A, AJ, ApJ, MNRAS, 2004-present

Review panels: nineteen panels, including four chaired, 2008-present

Frequent user of ground-based and space-based observing facilities and archival datasets, surveys: SDSS-I,II,III,IV,V, Subaru-PFS; SDSS-III Collaboration Council Representative from JHU (2011-2015); SDSS Collaboration meeting, organizing committee 06/2013 – 120 participants; SDSS-V Collaboration Council Representative from JHU (2020-present)

JHU Physics Fair volunteer, 2013

BEST project mentor: supervised research internship of high-school physics teacher, summer 2012, 2013

Member, American Astronomical Society, 2002-present; volunteer at the Jan 2011 meeting / Doxsey, Chambliss awards judge; Member, International Astronomical Union, 2015-present.

Led public observing sessions at Princeton University, 2002

Created and maintained the graduate students' webpage of the Department of Astrophysical Sciences, Princeton University, 2003-2005

Member of the undergraduate admissions committee, Department of General and Applied Physics, Moscow Institute of Physics and Technology, 1997-2000

Member of the Russian National Physics Olympiad jury, 1996-1999

#### **MEDIA HIGHLIGHTS**

---

“IAS welcomes 271 scholars for 2021-22 academic year”, 09/2021,  
<https://www.ias.edu/news/2021/welcome-day>

“Hubble spots double quasars in merging galaxies”, 04/2021,  
<https://hubblesite.org/contents/news-releases/2021/news-2021-14.html>

“A hidden population of high-redshift double quasars unveiled by astrometry”, 04/2021,  
<https://astronomycommunity.nature.com/posts/a-hidden-population-of-high-redshift-double-quasars->

“Black Hole Pairs Found in Distant Merging Galaxies”, 04/2021,  
<https://noirlab.edu/public/news/noirlab2113/>

“Paradoxically, white dwarf stars shrink as they gain mass”, 08/2020,  
<https://www.sciencenews.org/article/white-dwarf-stars-shrink-size-gain-mass>  
“Johns Hopkins astrophysicists observe long-theorized quantum phenomena”, 08/2020,  
<https://hub.jhu.edu/2020/07/30/astrophysicists-observe-gravitational-redshift-effect/>  
“Do extremely reddened quasars extinguish star formation?”, 11/2016,  
[https://www.eurekalert.org/pub\\_releases/2016-11/uoc--der111516.php](https://www.eurekalert.org/pub_releases/2016-11/uoc--der111516.php)  
“Study finding first observed evidence of galactic-wind phenomenon”, 03/2016,  
<https://www.sciencedaily.com/releases/2016/03/160323115925.htm?>  
“Far fewer stars are born due to intense radiation from quasars”, 03/2016,  
<https://hub.jhu.edu/2016/03/23/quasar-slow-star-formation/>  
“Nadia L. Zakamska wins the 2014 Newton Lacy Pierce Prize of the American Astronomical Society”,  
01/2014,  
<http://aas.org/media/press-releases/aas-announces-2014-award-recipients>  
“SDSS reveals hidden population of powerful black holes”, 04/2008,  
<http://www.philstar.com/starweek-magazine/55664/asking-questions-finding-answers>

## **DEPARTMENT AND UNIVERSITY SERVICE**

---

Director of graduate studies for the department of Physics and Astronomy, ~120 students. Graduate program committee: 09/2011 – 06/2021, as Chair: 01/2018 – 06/2021. Helped re-develop graduate program and graduate curriculum to put more emphasis on early research; the new program was approved by faculty and went into effect in May 2012. The median duration of the PhD decreased by ~1.5 years over the last ~10 years.

Graduate examination service (GBOs, prelims, Master’s research exams): 20; thesis defenses: 17; thesis committees: 7 students; wrote, administered and graded a written graduate examination for 25 students in 01/2012; graded 13 written graduate examinations 08/2015; evaluated 8 research examinations 10/2015, and as Chair of the research exam committee organized all research examinations in Fall 2016, 2017 and 2018, and personally evaluated 10, 11 and 12 respectively.

Chair of the Davis Postdoctoral Fellowship committee (Fall 2015 - Spring 2021); routinely interviewed postdoctoral applicants for the department starting in 2011.

Recruitment committee: 2011 – 2017, including as Chair and co-Chair. Organized graduate and undergraduate open houses; developed promotional materials for the undergraduate and the graduate program; organized JHU graduate program booths at physics and astronomy conferences; wrote the contents for the website of the Department of Physics and Astronomy.

Undergraduate research internships: summers 2017-2021, eighteen undergraduates, seven postdoctoral, graduate and undergraduate co-advisors; obtained external funding and oversaw scientific and mentoring activities, website: <http://sites.krieger.jhu.edu/jhu-care>

Faculty search committee, 2017 – 2018

Astrophysics representative to the TIPAC committee, 07/2015 – 08/2018

JHU representative in the SDSS-V Collaboration Council (11/2020 – present); SDSS-III Collaboration Council (01/2012 – 12/2015); member of SDSS collaboration meeting organizing committee (summer 2013); organizing committee for JHU / STScI winter colloquia (fall 2011).

## **INVITED PRESENTATIONS**

---

### **Invited seminars and colloquia:**

CITA seminar (Toronto, Canada, 04/2022);

Princeton / IAS Joint Colloquium (Princeton, NJ, 11/2021);  
Astro-Cosmic Centre, Lebedev Physical Institute (Moscow, Russia, 05/2021);  
UC Riverside (Riverside, CA, 04/2021);  
Technion (Israel, 04/2021);  
Johns Hopkins University (Baltimore, MD, 10/2020);  
Charles University (Prague, Czech Republic, 04/2019);  
ESO / MPA / MPE / USM (Garching, Germany, 04/2019);  
Virginia Tech (Blacksburg, VA, 04/2018);  
Northwestern University (Chicago, IL, 02/2017);  
University of Virginia and NRAO (Charlottesville, VA, 12/2016);  
University of Colorado (Boulder, CO, 11/2016);  
MIT (Cambridge, MA, 11/2016);  
Columbia University (New York City, NY, 10/2016);  
Michigan State University (East Lansing, MI, 10/2016);  
Princeton University (Princeton, NJ, 02/2016);  
Stanford University (Menlo Park, CA, 04/2015);  
Purdue University (West Lafayette, IN, 03/2015);  
Pennsylvania State University (State College, PA, 01/2015);  
Space Telescope Science Institute (Baltimore, MD, 01/2015);  
Canadian Institute for Theoretical Astrophysics (Toronto, Canada, 10/2014);  
Johns Hopkins University (Baltimore, MD, 03/2014);  
Goddard Space Flight Center (Greenbelt, MD, 11/2012);  
University of Maryland (College Park, MD, 03/2012);  
Harvard-Smithsonian Center for Astrophysics (Cambridge, MA, 12/2011);  
Yale Center for Astronomy and Astrophysics (New Haven, CT, 12/2011);  
Institute for Advanced Study (Princeton, NJ, 04/2011);  
Ohio State University (Columbus, OH, 03/2011);  
University of Hawaii (Honolulu, HI, 12/2010);  
Gemini Observatory (Hilo, HI, 12/2010);  
Stanford University (Menlo Park, CA, 12/2010);  
UC Berkeley (Berkeley, CA, 12/2010);  
New York University (New York, NY, 02/2010);  
Johns Hopkins University (Baltimore, MD, 02/2010);  
University of Arizona (Tucson, AZ, 02/2010);  
University of Chicago (Chicago, IL, 01/2010);  
University of Pittsburgh (Pittsburgh, PA, 01/2010);  
Columbia (New York, NY, 11/2009);  
New York University (New York, NY, 10/2009);  
Institute for Advanced Study (Princeton, NJ, 03/2009, 04/2009);  
Caltech (Pasadena, CA, 01/2009);  
MIT (Cambridge, MA, 01/2008);  
CITA (Toronto, Canada, 01/2008);  
Johns Hopkins University (Baltimore, MD, 10/2007);  
University of Wisconsin (Madison, WI, 09/2007);  
University of Arizona (Tucson, AZ, 04/2007) [visiting as Douglass Scholar];  
MPA/MPE (Garching, Germany, 06/2006);  
UC Berkeley (Berkeley, CA, 11/2005);

MIT (Cambridge, MA, 03/2005)

**Invited conference presentations and reviews:**

Invited talk at European Astronomical Society meeting, Valencia, Spain, 06/2022;  
Invited talk at “Multiphase AGN Feeding & Feedback II”, Sesto, Italy, 06/2022;  
Invited talk at the annual symposium of the Institute for Data Intensive Engineering and Science, Baltimore, MD, 10/2021;  
Invited talk at “Cosmic evolution of quasars”, Peking, China, 10/2019;  
Invited participant at “Scialog: time domain astrophysics”, Tucson, AZ, 05/2019;  
Invited review at “Breaking the limits: Super-Eddington accretion”, Sardinia, Italy, 10/2018;  
Invited review at “Are AGN special?”, Durham, England, 08/2018;  
Invited talk at “Multiphase AGN feeding & feedback”, Sesto, Italy, 07/2018;  
Invited talk at “Unsolved Problems in Astrophysics and Cosmology”, Budapest, Hungary, 07/2018;  
Invited review at “Massive black holes in evolving galaxies”, IAP, Paris, France, 06/2018;  
Invited participant at “Scialog: time domain astrophysics”, Tucson, AZ, 05/2018;  
Invited review at “The radio and X-ray connection in accreting objects”, Monopoli, Italy, 05/2018;  
Invited talk at SpaceAtHopkins Symposium at Johns Hopkins (Baltimore, MD, 04/2018);  
Invited talk at “Observations and theory of quasar outflows”, Leiden, Netherlands, 03/2017;  
Invited talk at “An interplay between local and global processes in galaxies”, Cozumel, Mexico, 04/2016;  
Invited talk at “A 3D view on galaxy evolution”, Heidelberg, Germany, 07/2015;  
Invited talk at “Science and Future of Gemini”, Toronto, ON, 06/2015;  
Invited review “WISE quasars” at WISE 5-year anniversary meeting, Pasadena, CA, 02/2015;  
Invited participant, National Academy of Sciences, Kavli Frontiers of Science, Irvine, CA, 11/2014;  
Invited talk “Observations of ionized gas outflows” at “Quenching and Quiescence”, Heidelberg, Germany, 07/2014;  
Plenary talk at DC/MD/VA Astronomy Conference for young scientists, Washington, DC, 07/2014;  
Invited talk “Feedback in obscured quasars” at “Powerful AGN”, Port Douglas, QLD, Australia, 06/2014;  
Plenary talk / Newton Lacy Pierce prize lecture at the American Astronomical Society Meeting, Boston, MA, 06/2014;  
Invited participant, Astrophysics Workshop, Calistoga, CA, 04/2014  
Invited talk “Observations of feedback in radio-quiet quasars” at mini-workshop “AGN feedback”, JHU, 11/2013;  
Invited talk “Quasar feedback” at “Illuminating the galaxy-AGN connection”, Ringberg Castle, Germany, 12/2012;  
Invited talk “Quasar feedback” at “Gas, stars and black holes in the galaxy ecosystem”, Leiden, Netherlands, 07/2012;  
Invited talk “Identification of AGN in optical surveys” at “Obscured AGN across cosmic time”, Seon, Germany, 06/2007;  
Invited talk “Type 2 quasars” at special session “Multi-wavelength Astronomy and the SDSS” of the 204th American Astronomical Society Meeting, Denver, CO, 05/2004;  
co-author of an invited review talk with S. Tremaine “Extrasolar planet orbits and eccentricities” at “The Search for Other Worlds”, College Park, MD, 10/2003

**Invited public talks:**

“Supermassive black holes” at “Women in Physics” event for the Physics and Astronomy Advisory Council, Baltimore, MD, 12/2020;  
“The quest for other worlds”, private event by the Director of the Institute for Advanced Study, Princeton, NJ, 04/2016;

“The New Era of Gravitational Wave Astronomy”, public discussion, panel member, Institute for Advanced Study, Princeton, NJ, 02/2016;  
“Women serious about science”, Baltimore Polytechnic Institute (magnet science high school), Baltimore, MD, 12/2014;  
“Black hole winds”, Society of Physics Students, JHU, Baltimore, MD, 10/2013;  
“Gone with the wind: black holes and their gusty influence on the birth of galaxies”, Institute for Advanced Study, Princeton, NJ, 05/2013;  
“Black holes: seeing the invisible”, Chicago, IL, 05/2007;  
“The search for other worlds”, Institute for Advanced Study, Princeton, NJ, 10/2006

## **CURRENT PROJECTS**

---

Winds launched by processes near supermassive black holes play a key role in galaxy evolution, but have long evaded direct detection. In the last few years, our group has discovered quasar winds through multiple techniques, and I am conducting a comprehensive observational study of this phenomenon using ground-based and space-based telescopes. We are observing and modeling quasar-driven winds in the nearby universe to characterize their physical conditions and energetics. Furthermore, we are uncovering evidence of extreme quasar feedback at the epoch of peak galaxy formation and exploring the impact they had on the formation of the massive galaxies.

With the recent discovery of gravitational waves from neutron star and black hole mergers and with upcoming large time-variability surveys like Legacy Survey of Space and Time (LSST), the exploration of the variable universe is the emerging frontier of astrophysics. Our group is pursuing a wide range of theoretical and observational projects in Galactic astronomy to take advantage of the discovery space of variability surveys, from identifying exotic products of stellar evolution to probing planet formation.



## PUBLICATIONS

---

*h*-index: 45 (Astrophysics Data System), 48 (Google Scholar)

Asterisk marks students and postdocs in my group; two asterisks if co-advised.

### Refereed publications:

121. Lau M.W., Hamann F., Gillette J., Perrotta S., Rupke D.S.N., Wylezalek D., Zakamska N.L.:  
[Probing the inner circumgalactic medium and quasar illumination around the reddest “extremely red quasar” \(ERQ\)](#),  
*Monthly Notices of the Royal Astronomical Society*, submitted (2022)  
<https://arxiv.org/abs/2203.06203>
120. \*Hwang H.-C., Ting Y.-S., Zakamska N.L.:  
[The eccentricity distribution of wide binaries and their individual measurements](#),  
*Monthly Notices of the Royal Astronomical Society*, in press (2021)  
<https://arxiv.org/abs/2111.01789>
119. \*Hwang H.-C., Ting Y.-S., Conroy C., Zakamska N.L., El-Badry K., Cargile P., Zaritsky D., \*Chandra V., Han J.J., Speagle J.S., Bonaca A.:  
[Wide binaries from the H3 survey: the thick disk and halo have similar wide binary fractions](#),  
*Monthly Notices of the Royal Astronomical Society*, in press (2021)  
<https://arxiv.org/abs/2111.01788>
118. \*Chandra V., \*Hwang H.-C., Zakamska N.L., Blouin S., Swan A., Marsh T.R., Shen K.J., Gänsicke B.T., Hermes J.J., Putterman O., Bauer E.B., \*Petrosky E., Dhillon V.S., Littlefair S.P., Ashley R.P.:  
[The SNIa Runaway LP 398-9: Detection of Circumstellar Material and Surface Rotation](#),  
*Monthly Notices of the Royal Astronomical Society*, in press (2021)  
<https://arxiv.org/abs/2110.06935>
117. \*Fezenko G.B., \*Hwang H.-C., Zakamska N.L.:  
[Enhancement of Double-Close-Binary Quadruples](#),  
*Monthly Notices of the Royal Astronomical Society*, 511, 3881 (2022)  
<https://ui.adsabs.harvard.edu/abs/2022MNRAS.511.3881F/abstract>
116. Chen Y.-C., \*Hwang H.-C., Shen Y., Liu X., Zakamska N.L., Yang Q., Li J.I.:  
[Varstrometry for off-nucleus and Dual sub-Kpc AGN \(VODKA\): Hubble Space Telescope Discovers Double Quasars](#),  
*Astrophysical Journal*, 925, 162 (2022)  
<https://ui.adsabs.harvard.edu/abs/2022ApJ...925..162C/abstract>
115. \*Chandra V., \*Hwang H.-C., Zakamska N.L., Gänsicke B.T., Hermes J.J., Schwobe A., Badenes C., Tovmassian G., Bauer E.B., Maoz D., Schreiber M.R., Toloza O.F., Inight K.P., Rix H.-W., Brown W.R.:  
[A 99-minute Double-lined White Dwarf Binary from SDSS-V](#),  
*Astrophysical Journal*, 921, 160 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021ApJ...921..160C/abstract>  
*The first science paper of the SDSS-V survey featured featured in the 2021 Collaboration Meeting Plenary talk*

114. \*Vayner A., Zakamska N.L., Wright S.A., Armus L., Murray N., Walth G.:  
[Multi-phase outflows in high redshift quasar host galaxies](#),  
*Astrophysical Journal*, 923, 59 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021ApJ...923...59V/abstract>
113. \*Vayner A., Zakamska N.L., Riffel R.A., Alexandroff R., Cosens M., Hamann F., Perrotta S., Rupke D.S.N., Storchi-Bergmann T., Veilleux S., Walth G., Wright S., Wylezalek D.:  
[Powerful winds in high-redshift obscured and red quasars](#),  
*Monthly Notices of the Royal Astronomical Society*, 504, 4445 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021MNRAS.504.4445V/abstract>
112. Al Yazeedi A., Katkov Y., Gelfand J.D., Wylezalek D., Zakamska N.L., Liu W.  
[The impact of low luminosity AGN on their host galaxies: A radio and optical investigation of the kpc-scale outflow in MaNGA 1-166919](#),  
*Astrophysical Journal*, 916, 102 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021ApJ...916..102A/abstract>
111. \*Petrosky E., \*Hwang H.-C., Zakamska N.L., \*Chandra V., \*Hill M.J.:  
[Variability, periodicity, and contact binaries in WISE](#),  
*Monthly Notices of the Royal Astronomical Society*, 503, 3975 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021MNRAS.503.3975P/abstract>
110. Riffel R.A., Storchi-Bergmann T., Riffel R., Bianchin M., Zakamska N.L., Ruschel-Dutra D., Schönell A.J., Rosario D.J., Rodriguez-Ardila A., Fischer T.C., Davies R.I., Dametto N.Z., Dahmer-Hahn L.G., Crenshaw D.M., Burtscher K., Bentz M.C.:  
[The AGNIFS survey: distribution and excitation of the hot molecular and ionised gas in the inner kpc of nearby Seyfert galaxies](#),  
*Monthly Notices of the Royal Astronomical Society*, 504, 3265 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021MNRAS.504.3265R/abstract>
109. Shen Y., Chen Y.-C., \*Hwang H.-C., Liu X., Zakamska N.L., Oguri M., Li J.I.:  
[A hidden population of high-redshift close quasar pairs unveiled by astrometry](#),  
*Nature Astronomy*, 5, 569 (2021)  
<https://doi.org/10.1038/s41550-021-01323-1>  
*Media: Hubble, NOIRLab, Nature Blog, JHU HUB, UIUC*
108. \*Ishikawa Y., Goulding A., Zakamska N., Hamann F., Vayner A., Veilleux S., Wylezalek D.:  
[X-ray analysis of SDSS J165202.60+172852.4, an obscured quasar with outflows at peak galaxy formation epoch](#),  
*Monthly Notices of the Royal Astronomical Society*, 502, 3769 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021MNRAS.502.3769I/abstract>
107. \*\*Xiang K.M., Nataf D.M., Athanassoula E., Zakamska N.L., Rowlands K., Masters K., Fraser-McKelvie A., Drory N.:  
[Buckling bars in face-on galaxies observed with MaNGA](#),  
*Monthly Notices of the Royal Astronomical Society*, 909, 125 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021ApJ...909..125X/abstract>
106. \*Hwang H.-C., Ting Y.-S., Schlaufman K.C., Zakamska N.L., Wyse R.F.G.:  
[The non-monotonic, strong metallicity dependence of the wide-binary fraction](#),

- Monthly Notices of the Royal Astronomical Society*, 501, 4329 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021MNRAS.501.4329H/abstract>
105. Riffel R.A., Dors O.L., Armah M., Storchi-Bergmann T., Feltre A., Cardaci M.V., Hägele G.F., Ruschel-Dutra D., Krabbe A.C., Pérez-Montero E., Zakamska N.L., Freitas I.C.:  
[Chemical abundances in Seyfert galaxies – V. The discovery of shocked emission off AGN ionization axis](#),  
*Monthly Notices of the Royal Astronomical Society*, 501, L54 (2021)  
<https://ui.adsabs.harvard.edu/abs/2021MNRAS.501L..54R/abstract>
104. Murchikova L., Murphy E.J., Lis D.C., Armus L., de Mink S., Sheth K., Zakamska N., Tramper F., Bongiorno A., Elvis M., Kewley L., Sana H.:  
[Reconstructing EUV spectrum of star forming regions from millimeter recombination lines of HI, HeI, and HeII](#),  
*Astrophysical Journal*, 903, 29 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...903...29M/abstract>
103. \*Chandra V., \*Hwang H.-C., Zakamska N.L., Budavari T.:  
[Computational tools for the spectroscopic analysis of white dwarfs](#),  
*Monthly Notices of the Royal Astronomical Society*, 497, 2688 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020MNRAS.497.2688C>
102. \*Hwang H.-C., Hamer J.H., Zakamska N.L., Schlaufman K.C.:  
[Very wide companion fraction from Gaia DR2: weak enhancement for hot Jupiter hosts, and strong enhancement for contact binaries](#),  
*Monthly Notices of the Royal Astronomical Society*, 497, 2250 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020MNRAS.497.2250H>
101. \*Chandra V., \*Hwang H.-C., Zakamska N.L., Cheng S.:  
[A Gravitational Redshift Measurement of the White Dwarf Mass-Radius Relation](#),  
*Astrophysical Journal*, 899, 146 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...899..146C>  
*Media: JHU HUB, Science News, Science Daily, Today Headline, Nerdist*
100. Riffel R.A., Zakamska N.L., Riffel R., Storchi-Bergmann T.:  
[Ionized and hot molecular outflows in the inner 500 pc of NGC1275](#),  
*Monthly Notices of the Royal Astronomical Society*, 496, 4857 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020MNRAS.496.4857R>
99. Xu X., Zakamska N., Arav N., Miller T., Benn C.:  
[Evidence that Emission and Absorption Outflows in Quasars Are Related](#),  
*Astrophysical Journal*, 495, 305 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020MNRAS.495..305X>
98. \*Dempsey R., Zakamska N.L., Owen J.E.:  
[Formation of Orion Fingers](#),  
*Monthly Notices of the Royal Astronomical Society*, 495, 1172 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020MNRAS.495.1172D>
97. Mingozzi M., Belfiore F., Cresci G., Bundy K., Bershady M., Bizyaev D., Blanc G., Boquien M., Drory N., Fu H., Maiolino R., Riffel R., Schaefer A., Telles E., Tremonti C., Storchi-Bergmann T.,

- Zakamska N., Zhang K.:  
SDSS IV MaNGA - Metallicity and ionisation parameter in local star-forming galaxies from Bayesian fitting to photoionisation models,  
*Astronomy & Astrophysics*, 636, 42 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020A%26A...636A..42M>
96. Somalwar J., Johnson S.D., Stern J., Goulding A.D., Greene J.E., Zakamska N.L., Alexandroff R.M., Chen H.-W.:  
Spatially-resolved UV diagnostics of AGN feedback: radiation pressure dominates in a prototypical quasar-driven superwind,  
*Astrophysical Journal*, 890, L28 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...890L..28S>
95. \*Hwang H.-C., Zakamska N.L.:  
Lifetime of short-period binaries measured from their Galactic kinematics,  
*Monthly Notices of the Royal Astronomical Society*, 493, 227 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020MNRAS.493.2271H>
94. \*Wylezalek D., \*\*Flores A.M., Zakamska N.L., Greene J.E., Riffel R.A.:  
Ionized gas outflow signatures in SDSS-IV MaNGA active galactic nuclei,  
*Monthly Notices of the Royal Astronomical Society*, 492, 4680 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020MNRAS.492.4680W>
93. Huang C.D., Riess A.G., Yuan W., Macri L.M., Zakamska N.L., Casertano S., Whitelock P.A., Hoffmann S.L., Filippenko A.V., Scolnic D.:  
Hubble Space Telescope Observations of Mira Variables in the Type Ia Supernova Host NGC 1559: An Alternative Candle to Measure the Hubble Constant  
*Astrophysical Journal*, 889, 5 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...889....5H>
92. \*Hwang H.-C., Shen Y., Zakamska N.L., Liu X.:  
Varstrometry for Off-nucleus and Dual sub-Kpc AGN (VODKA): Methodology and Initial Results with Gaia DR2,  
*Astrophysical Journal*, 888, 73 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020ApJ...888...73H>
91. Riffel R.A., Zakamska N.L., Riffel R.:  
Active Galactic Nuclei winds as the origin of the H<sub>2</sub> emission excess in nearby galaxies,  
*Monthly Notices of the Royal Astronomical Society*, 491, 1518 (2020)  
<https://ui.adsabs.harvard.edu/abs/2020MNRAS.491.1518R>
90. \*\*Hall K.R., Zakamska N.L., ACT collaboration (23 co-authors in alphabetical order):  
Quantifying the Thermal Sunyaev-Zel'dovich Effect and Excess Millimeter Emission in Quasar Environments,  
*Monthly Notices of the Royal Astronomical Society*, 490, 2315 (2019)  
<https://ui.adsabs.harvard.edu/abs/2019MNRAS.490.2315H>
89. Shen Y., \*Hwang H.-C., Zakamska N.L., Liu X.:  
Varstrometry for Off-nucleus and Dual sub-Kpc AGN (VODKA): How Well-centered Are Low-z AGN?  
*Astrophysical Journal Letters*, 885, L4 (2019)  
<https://ui.adsabs.harvard.edu/abs/2019ApJ...885L...4S>

88. Zakamska N. L., \*Sun A.-L., Strauss M. A., \*Alexandroff R. M., Brandt W. N., Chiaberge M., Greene J. E., Hamann F., Liu G., Perrotta S., Ross N. P., \*Wylezalek D.:  
[Host galaxies of high-redshift extremely red and obscured quasars](#),  
*Monthly Notices of the Royal Astronomical Society*, 489, 497 (2019)  
<https://ui.adsabs.harvard.edu/abs/2019MNRAS.489..497Z>
87. Perrotta S., Hamann F., Zakamska N.L., \*Alexandroff R.M., Rupke D., \*Wylezalek D.:  
[ERQs are the BOSS of Quasar Samples: The highest-velocity \[OIII\] quasar outflows](#),  
*Monthly Notices of the Royal Astronomical Society*, 488, 4126 (2019)  
<https://ui.adsabs.harvard.edu/abs/2019MNRAS.488.4126P>
86. \*Lambrides E. L., Petric A. O., Tchernyshyov K., Zakamska N. L., Watts D. J.:  
[Mid-infrared spectroscopic evidence for AGN heating warm molecular gas](#),  
*Monthly Notices of the Royal Astronomical Society*, 487, 1823 (2019)  
<https://ui.adsabs.harvard.edu/abs/2019MNRAS.487.1823L>
85. Pirzkal N., et al. (33 co-authors, FIGS collaboration):  
[A Two-dimensional Spectroscopic Study of Emission-line Galaxies in the Faint Infrared Grism Survey \(FIGS\). I. Detection Method and Catalog](#),  
*Astrophysical Journal*, 868, 61 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018ApJ...868...61P>
84. Rowlands K., Heckman T., Wild V., Zakamska N., Barrera-Ballesteros J., Thilker D., Rodriguez-Gomez V., Lotz J., Hwang H.-C., Smethurst R., Andrews B. H., Brownstein J. R.:  
[Spatially resolved star-formation histories and the connection to galaxy physical properties](#),  
*Monthly Notices of the Royal Astronomical Society*, 480, 2544 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.480.2544R>
83. \*\*Hall K. R., Crichton D., Marriage T., Zakamska N. L., Mandelbaum R.:  
[Downsizing of Star Formation Measured from the Clustered Infrared Background Correlated with Quasars](#),  
*Monthly Notices of the Royal Astronomical Society*, 480, 149 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.480..149H>
82. \*\*Qin W., Nataf D. M., Zakamska N. L., Wood P. R., Casagrande L.:  
[The Mira-based distance to the Galactic Center](#),  
*Astrophysical Journal*, 865, 47 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.479.4936A>
81. \*Alexandroff R. M., Zakamska N. L., Barth A., Hamann F., Strauss M. A., Krolik J., Greene J. E., Pâris I., Ross N. P.:  
[Spectropolarimetry of high redshift obscured and red quasars](#),  
*Monthly Notices of the Royal Astronomical Society*, 479, 4936 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.479.4936A>
80. \*\*Sun A.-L., Greene J. E., Zakamska N. L., Goulding A., Strauss M. A., Huang S., Johnson S., Kawaguchi T., Matsuoka Y., Marsteller A. A., Nagao T., Toba Y.:  
[Imaging Extended Emission-Line Regions of Obscured AGN with the Subaru Hyper Suprime-Cam Survey](#),  
*Monthly Notices of the Royal Astronomical Society*, 480, 2302 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.480.2302S>

79. \*He Z., \*Sun A.-L., Zakamska N. L., Wylezalek D., Greene J. E., Rembold S. B., Riffel R., Riffel R. A.:  
[Morphology of AGN emission line regions in SDSS-IV MaNGA Survey](#),  
*Monthly Notices of the Royal Astronomical Society*, 478, 3614 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.478.3614H>
78. \*Dempsey R., Zakamska N. L.:  
[The Size-Luminosity Relationship of Quasar Narrow-Line Regions](#),  
*Monthly Notices of the Royal Astronomical Society*, 477, 4615 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.477.4615D>
77. Goulding A. D., Zakamska N. L., \*Alexandroff R. M., Assef R. J., Banerji M., Hamann F., \*Wylezalek D., Brandt W. N., Greene J. E., Lansbury G. B., Pâris I., Richards G., Stern D., Strauss M. A.:  
[High redshift extremely red quasars in X-rays](#),  
*Astrophysical Journal*, 856, 4 (2018)  
<http://esoads.eso.org/abs/2018ApJ...856...4G>
76. Timlin J. D., Ross N. P., Richards G. T., Myers A. D., Pellegrino A., Bauer F. E., Lacy M., Schneider D. P., Wollack E. J., Zakamska N. L.:  
[The Clustering of High-Redshift \( \$2.9 \leq z \leq 5.1\$ \) Quasars in SDSS Stripe 82](#),  
*Astrophysical Journal*, 859, 20 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018ApJ...859...20T>
75. Pharo J., et al. (FIGS collaboration, 21 co-authors):  
[Spectrophotometric redshifts in the faint infrared grism survey: tracing large scale structure for faint galaxies](#),  
*Astrophysical Journal*, 856, 116 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018ApJ...856..116P>
74. \*Hwang H.-C., Zakamska N. L., \*Alexandroff R. M., Hamann F., Greene J. E., Perrotta S., Richards G. T.:  
[Winds as the origin of radio emission in  \$z = 2.5\$  radio-quiet extremely red quasars](#),  
*Monthly Notices of the Royal Astronomical Society*, 477, 830 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.477..830H>
73. Abolfathi B. et al. (SDSS collaboration, over 300 co-authors in alphabetical order):  
[The fourteenth data release of the Sloan Digital Sky Survey](#),  
*Astrophysical Journal Supplementary Series*, 235, 42 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018ApJS..235...42A>
72. Zakamska N. L.:  
[Relativistic jets: an astrophysical laboratory for the Doppler effect](#),  
*American Journal of Physics*, 86, 354 (2018)  
<https://aapt.scitation.org/doi/10.1119/1.5022796>
71. Barrera-Ballesteros J. K., Heckman T., Sanchez S. F., Zakamska N. L., \*Cleary J., Zhu G., Brinkmann J., Drory N.:  
[SDSS-IV MaNGA: What Shapes The Distribution Of Metals In Galaxies? Exploring The Roles Of The Local Gas Fraction And Escape Velocity](#),  
*Astrophysical Journal*, 852, 74 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018ApJ...852...74B>

70. \*Wylezalek D., Zakamska N. L., Greene J. E., Riffel R. A., Andrews B. H., Merloni A., Thomas D., Yan R.:  
[SDSS-IV MaNGA: Identification of active galactic nuclei in optical integral field unit surveys](#),  
*Monthly Notices of the Royal Astronomical Society*, 474, 1499 (2018)  
<https://ui.adsabs.harvard.edu/abs/2018MNRAS.474.1499W>
69. Albareti F. D. et al. (SDSS collaboration, over 300 co-authors in alphabetical order):  
[The 13th Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-IV Survey Mapping Nearby Galaxies at Apache Point Observatory](#),  
*Astrophysical Journal Supplementary Series*, 233, 25 (2017)  
<http://esoads.eso.org/abs/2017ApJS..233...25A>
68. Barrows R. S., Comerford J. M., Zakamska N. L., Cooper M. C.:  
[Observational constraints on correlated star formation and active galactic nuclei in late-stage galaxy mergers](#),  
*The Astrophysical Journal*, 850, 27 (2017)  
<http://esoads.eso.org/abs/2017ApJ...850...27B>
67. Hickox R. C., Myers A. D., Greene J. E., Hainline K. N., Zakamska N. L., DiPompeo M. A.:  
[Composite spectral energy distributions and infrared-optical colors of type 1 and type 2 quasars](#),  
*The Astrophysical Journal*, 849, 53 (2017)  
<http://esoads.eso.org/abs/2017ApJ...849...53H>
66. Pirzkal N., et al. (FIGS collaboration, 28 co-authors):  
[FIGS – Faint Infrared Grism Survey: Description and Data Reduction](#),  
*The Astrophysical Journal*, 846, 84 (2017)  
<http://esoads.eso.org/abs/2017ApJ...846...84P>
65. Zhu G. B., Barrera-Ballesteros J. K., Heckman T. M., Zakamska N. L., Yan R., Brinkmann J.:  
[A local leaky-box model for the local stellar surface density-gas surface density-gas phase metallicity relation](#),  
*Monthly Notices of the Royal Astronomical Society*, 468, 4494 (2017)  
<http://adsabs.harvard.edu/abs/2017MNRAS.468.4494Z>
64. Blanton M. R., Bershadsky M. A., et al. (SDSS collaboration – 351 co-authors in alphabetical order):  
[Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies and the Distant Universe](#),  
*The Astronomical Journal*, 154, 28 (2017)  
<http://esoads.eso.org/abs/2017AJ....154...28B>
63. \*Wylezalek D., Schnorr Müller A., Zakamska N. L., Storchi-Bergmann T., Greene J. E., \*Kelly M., Liu G., Law D. R., Barrera-Ballesteros J. K., Riffel R. A.:  
[Zooming into local active galactic nuclei: The power of combining SDSS-IV MaNGA with higher resolution integral field unit observations](#),  
*Monthly Notices of the Royal Astronomical Society*, 467, 2612 (2017)  
<http://adsabs.harvard.edu/abs/2017MNRAS.467.2612W>
62. Pei L., et al. (STORM collaboration, ~140 collaborators):  
[Space telescope and optical reverberation mapping project. V. Optical spectroscopic campaign and emission-line analysis for NGC5548](#),  
*The Astrophysical Journal*, 837, 131 (2017)  
<http://adsabs.harvard.edu/abs/2017ApJ...837..131P>

61. Sun A.-L., Greene J. E., Zakamska, N. L.:  
[Sizes and kinematics of extended narrow-line regions in luminous obscured AGN selected by broadband images](#),  
*The Astrophysical Journal*, 835, 222 (2017)  
<http://adsabs.harvard.edu/abs/2017ApJ...835..222S>
60. Hamann F., Zakamska N. L., Ross N. P., Pâris I., \*Alexandroff R. M., Villforth C., Richards G. T., Herbst H., Brandt W. N., Cook B., Denney K. D., Greene J. E., Schneider D. P., Strauss M. A.:  
[Extremely Red Quasars in BOSS](#),  
*Monthly Notices of the Royal Astronomical Society*, 464, 3431 (2017)  
<http://adsabs.harvard.edu/abs/2017MNRAS.464.3431H>  
*Media: Eurekaalert, Science Daily, PhysOrg, Itchpost*
59. \*Alexandroff R. M., Zakamska N. L., van Velzen S., Greene J. E., Strauss M. A.:  
[Sensitive Radio Survey of Obscured Quasar Candidates](#),  
*Monthly Notices of the Royal Astronomical Society*, 463, 3056 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.463.3056A>
58. Barrera-Ballesteros J. K., Heckman T. M., Zhu G., Zakamska N. L., Sánchez S. F., Law D., Greene J. E., Pan K., Bizyaev D., Oravetz D., Simmons A., Malanushenko E., Roman Lopes A.:  
[Do galaxy global relationships emerge from local ones? I. The SDSS IV MaNGA surface mass density – metallicity relation](#),  
*Monthly Notices of the Royal Astronomical Society*, 463, 2513 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.463.2513B>
57. \*\*Yuan S., Strauss M. A., Zakamska N. L.:  
[Spectroscopic identification of type 2 quasars at  \$z < 1\$  in SDSS-III/BOSS](#),  
*Monthly Notices of the Royal Astronomical Society*, 462, 1603 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.462.1603Y>
56. Tilvi V., Pirzkal N., Malhotra S., Finkelstein S. L., Rhoads J. E., Windhorst R., Grogin N. A., Koekemoer A., Zakamska N. L., Ryan R., Christensen L., Hathi N., Pharo J., Joshi B., Yang H., Gronwall C., Cimatti A., Walsh J., O’Connell R., Straughn A., Ostlin G., Rothberg B., Livermore R. C., Hixon P., Gardner J. P.:  
[First results from Faint Infrared Grism Survey: first simultaneous detection of Ly  \$\alpha\$  emission and Ly break from a galaxy at  \$z = 7.51\$](#) ,  
*The Astrophysical Journal*, 827, L14 (2016)  
<http://adsabs.harvard.edu/abs/2016ApJ...827L..14T>
55. \*Wylezalek D., Zakamska N. L.:  
[Evidence of suppression of star formation by quasar-driven winds in gas-rich host galaxies at  \$z < 1\$ ?](#)  
*Monthly Notices of the Royal Astronomical Society*, 461, 3724 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.461.3724W>
54. Timlin J. D., Ross N. P., Richards G. T., Lacy M., Ryan E. L., Stone R. B., Bauer F. E., Brandt W. N., Fan X., Jiang L., LaMassa S. M., Myers A. D., Schneider D. P., Wollack E. J., Zakamska N. L.:  
[SpIES: The Spitzer IRAC Equatorial Survey](#),  
*The Astrophysical Journal Supplement*, 225, 1 (2016)  
<http://adsabs.harvard.edu/abs/2016ApJS...225....1T>



53. Zakamska N. L., Hamann F., Pâris I., Brandt W. N., Greene J. E., Strauss M. A., Villforth C., \*Wylezalek D., \*Alexandroff R. M., Ross N. P.:  
[Discovery of extreme \[OIII\]5007Å outflows in high-redshift red quasars](#),  
*Monthly Notices of the Royal Astronomical Society*, 459, 3144 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.459.3144Z>
52. \*Wylezalek D., Zakamska N. L., \*Liu G., \*Obied G.:  
[Towards a comprehensive picture of powerful quasars, their host galaxies and quasar winds at  \$z \sim 0.5\$](#) ,  
*Monthly Notices of the Royal Astronomical Society*, 457, 745 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.457..745W>
51. \*Obied G., Zakamska N. L., \*Wylezalek D., \*Liu G.:  
[Giant scattering cones in obscured quasars](#),  
*Monthly Notices of the Royal Astronomical Society*, 456, 2861 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.456.2861O>
50. Stern J., Faucher-Giguère C.-A., Zakamska N. L., Hennawi J. F.:  
[Constraining the Dynamical Importance of Hot Gas and Radiation Pressure in Quasar Outflows Using Emission Line Ratios](#),  
*The Astrophysical Journal*, 819, 130 (2016)  
<http://adsabs.harvard.edu/abs/2016ApJ...819..130S>
49. \*\*Crichton D., Gralla M. B., \*\*Hall K., Marriage T. A., Zakamska N. L., Battaglia N., Bond J. R., Devlin M. J., Hill J. C., Hilton M., Hincks A. D., Hufenberger K. M., Hughes J. P., Kosowsky A., Moodley K., Niemack M. D., Page L. A., Partridge B., Sievers J. L., Sifón C., Staggs S. T., Viero M. P., Wollack E. J.:  
[Evidence for the Thermal Sunyaev-Zel'dovich Effect Associated with Quasar Feedback](#),  
*Monthly Notices of the Royal Astronomical Society*, 458, 1478 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.458.1478C>  
*Media: Science Daily, JHU HUB, Sci-News, Space and science*
48. Zakamska N. L., \*Lampayan K., Petric A., Dicken D., Greene J. E., Heckman T. M., Hickox R. C., Ho L. C., Krolik J. H., Nesvadba N. P. H., Strauss M. A., Geach J. E., Oguri M., Strateva I. V.:  
[Star formation in quasar hosts and the origin of radio emission in radio-quiet quasars](#),  
*Monthly Notices of the Royal Astronomical Society*, 455, 4191 (2016)  
<http://adsabs.harvard.edu/abs/2016MNRAS.455.4191Z>
47. Ross N. P., Hamann F., Zakamska N. L., Richards G. T., Villforth C., Strauss M. A., Greene J. E., \*Alexandroff R., Brandt W. N., \*Liu G., Myers A. D., Pâris I., Schneider D. P.:  
[Extremely red quasars from SDSS, BOSS and WISE: classification of optical spectra](#),  
*Monthly Notices of the Royal Astronomical Society*, 453, 3932 (2015)  
<http://adsabs.harvard.edu/abs/2015MNRAS.453.3932R>
46. Alam S., Albareti F. D., Allende Prieto C., et al. (SDSS collaboration, 274 authors in alphabetical order):  
[The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III](#),  
*The Astrophysical Journal Supplement Series*, 219, 12 (2015)  
<http://adsabs.harvard.edu/abs/2015ApJS...219...12A>
45. Comerford J. M., Pooley D., Barrows R. S., Greene J. E., Zakamska N. L., Madejski G. M., Cooper M. C.:

- Merger-driven Fueling of Active Galactic Nuclei: Six Dual and Offset AGNs Discovered with Chandra and Hubble Space Telescope Observations,  
*The Astrophysical Journal*, 806, 219 (2015)  
<http://adsabs.harvard.edu/abs/2015ApJ...806..219C>
44. Cai Z., Fan X., Noterdaeme P., Wang R., McGreer I., Carithers B., Bian F., Miralda-Escudé J., Finley H., Pâris I., Schneider D. P., Zakamska N. L., Ge J., Petitjean P., Slosar A.:  
 A Glimpse at Quasar Host Galaxy Far-UV Emission Using Damped Ly $\alpha$ 's as Natural Coronagraphs,  
*The Astrophysical Journal*, 793, 139 (2014)  
<http://adsabs.harvard.edu/abs/2014ApJ...793..139C>
43. \*Liu G., Zakamska N. L., Greene J. E.:  
 Similarity of ionized gas nebulae around unobscured and obscured quasars,  
*Monthly Notices of the Royal Astronomical Society*, 442, 1303 (2014)  
<http://adsabs.harvard.edu/abs/2014MNRAS.442.1303L>
42. Sun A.-L., Greene J. E., Zakamska N. L., Nesvadba N. P. H.:  
 ALMA Observations of a Candidate Molecular Outflow in an Obscured Quasar,  
*The Astrophysical Journal*, 790, 160 (2014)  
<http://adsabs.harvard.edu/abs/2014ApJ...790..160S>
41. Zakamska N. L., Greene J. E.:  
 Quasar feedback and the origin of radio emission in radio-quiet quasars,  
*Monthly Notices of the Royal Astronomical Society*, 442, 784 (2014)  
<http://adsabs.harvard.edu/abs/2014MNRAS.442..784Z>
40. Greene J. E., Alexandroff R., Strauss M. A., Zakamska N. L., Lang D., \*Liu G., Pattarakijwanich P., Hamann F., Ross N. P., Myers A. D., Brandt W. N., York D., Schneider D. P.:  
 Near-infrared Spectra and Intrinsic Luminosities of Candidate Type II Quasars at  $2 < z < 3.4$ ,  
*The Astrophysical Journal*, 788, 91 (2014)  
<http://adsabs.harvard.edu/abs/2014ApJ...788...91G>
39. Greene J. E., Pooley D., Zakamska N. L., Comerford J. M., Sun A.-L.:  
 Extended X-Ray Emission from a Quasar-driven Superbubble,  
*The Astrophysical Journal*, 788, 54 (2014)  
<http://adsabs.harvard.edu/abs/2014ApJ...788...54G>
38. Hainline K. N., Hickox R. C., Greene J. E., Myers A. D., Zakamska N. L., \*Liu G., \*Liu X.:  
 Gemini Long-slit Observations of Luminous Obscured Quasars: Further Evidence for an Upper Limit on the Size of the Narrow-line Region,  
*The Astrophysical Journal*, 787, 65 (2014)  
<http://adsabs.harvard.edu/abs/2014ApJ...787...65H>
37. \*Hill M. J., Zakamska N. L.:  
 Warm molecular hydrogen in outflows from ultraluminous infrared Galaxies,  
*Monthly Notices of the Royal Astronomical Society*, 439, 2701 (2014)  
<http://adsabs.harvard.edu/abs/2014MNRAS.439.2701H>
36. \*Liu G., Zakamska N. L., Greene J. E., Nesvadba N. P. H., Liu X.:  
 Observations of feedback from radio-quiet quasars - II. Kinematics of ionized gas nebulae,  
*Monthly Notices of the Royal Astronomical Society*, 436, 2576 (2013)  
<http://adsabs.harvard.edu/abs/2013MNRAS.436.2576L>

35. Alexandroff R., Strauss M. A., Greene J. E., Zakamska N. L., Ross N. P., Brandt W. N., \*Liu G., Smith P. S., Ge J., Hamann F., Myers A. D., Petitjean P., Schneider D. P., Yesuf H., York D. G.: [Candidate type II quasars at  \$2 < z < 4.3\$  in the Sloan Digital Sky Survey III](#), *Monthly Notices of the Royal Astronomical Society*, 435, 3306 (2013)  
<http://adsabs.harvard.edu/abs/2013MNRAS.435.3306A>
34. Jia J., Ptak A., Heckman T., Zakamska N. L.: [An Archival Chandra and XMM-Newton Survey of Type 2 Quasars](#), *The Astrophysical Journal*, 777, 27 (2013)  
<http://adsabs.harvard.edu/abs/2013ApJ...777...27J>
33. Hainline K. N., Hickox R., Greene J. E., Myers A. D., Zakamska N. L.: [SALT Long-slit Spectroscopy of Luminous Obscured Quasars: An Upper Limit on the Size of the Narrow-line Region?](#), *The Astrophysical Journal*, 774, 145 (2013)  
<http://adsabs.harvard.edu/abs/2013ApJ...774..145H>
32. \*Liu G., Zakamska N. L., Greene J. E., Nesvadba N. P. H., Liu X.: [Observations of feedback from radio-quiet quasars - I. Extents and morphologies of ionized gas nebulae](#), *Monthly Notices of the Royal Astronomical Society*, 430, 2327 (2013)  
<http://adsabs.harvard.edu/abs/2013MNRAS.430.2327L>
31. Greene J. E., Zakamska N. L., Smith P. S.: [A Spectacular Outflow in an Obscured Quasar](#), *The Astrophysical Journal*, 746, 86 (2012)  
<http://adsabs.harvard.edu/abs/2012ApJ...746...86G>
30. Greene J. E., Zakamska N. L., Ho L. C., Barth A. J.: [Feedback in Luminous Obscured Quasars](#), *The Astrophysical Journal*, 732, 9 (2011)  
<http://adsabs.harvard.edu/abs/2011ApJ...732....9G>
29. Zakamska N. L., Pan M., Ford E. B.: [Observational biases in determining extrasolar planet eccentricities in single-planet systems](#), *Monthly Notices of the Royal Astronomical Society*, 410, 1895 (2011)  
<http://adsabs.harvard.edu/abs/2011MNRAS.410.1895Z>
28. Zakamska N. L.: [H<sub>2</sub> emission arises outside photodissociation regions in ultraluminous infrared galaxies](#), *Nature*, 465, 60 (2010)  
<http://adsabs.harvard.edu/abs/2010Natur.465...60Z>
27. \*Liu X., Zakamska N. L., Greene J. E., Strauss M. A., Krolik J. H., Heckman T. M.: [Host Galaxies of Luminous Type 2 Quasars at  \$z \sim 0.5\$](#) , *The Astrophysical Journal*, 702, 1098 (2009)  
<http://adsabs.harvard.edu/abs/2009ApJ...702.1098L>
26. Greene J. E., Zakamska N. L., Liu X., Barth A. J., Ho L. C.: [The Growth of Black Holes: Insights from Obscured Active Galaxies](#), *The Astrophysical Journal*, 702, 441 (2009)  
<http://adsabs.harvard.edu/abs/2009ApJ...702..441G>

25. Richards G. T., Deo R. P., Lacy M., Myers A. D., Nichol R. C., Zakamska N. L., Brunner R. J., Brandt W. N., Gray A. G., Parejko J. K., Ptak A., Schneider D. P., Storrie-Lombardi L. J., Szalay A. S.:  
[Eight-Dimensional Mid-Infrared/Optical Bayesian Quasar Selection](#),  
*The Astronomical Journal*, 137, 3884 (2009)  
<http://adsabs.harvard.edu/abs/2009AJ....137.3884R>
24. \*Reyes R., Zakamska N. L., Strauss M. A., \*Green J., Krolik J. H., Shen Y., Richards G. T., Anderson S. F., Schneider D. P.:  
[Space Density of Optically Selected Type 2 Quasars](#),  
*The Astronomical Journal*, 136, 2373 (2008)  
<http://adsabs.harvard.edu/abs/2008AJ....136.2373R>  
*Media: PhysOrg, Female Network, Phillipines Today, Inquierer, ABS-CBN, PhilStar*
23. Zakamska N. L., \*Gómez L., Strauss M. A., Krolik J. H.:  
[Mid-Infrared Spectra of Optically-Selected Type 2 Quasars](#),  
*The Astronomical Journal*, 136, 1607 (2008)  
<http://adsabs.harvard.edu/abs/2008AJ....136.1607Z>
22. Zakamska N. L., Begelman M. C., Blandford R. D.:  
[Hot Self-Similar Relativistic Magnetohydrodynamic Flows](#),  
*The Astrophysical Journal*, 679, 990 (2008)  
<http://adsabs.harvard.edu/abs/2008ApJ...679..990Z>
21. Hennawi J. F., Prochaska J. X., Burles S., Strauss M. A., Richards G. T., Schlegel D. J., Fan X., Schneider D. P., Zakamska N. L., Oguri M., Gunn J. E., Lupton R. H., Brinkmann J.:  
[Quasars Probing Quasars. I. Optically Thick Absorbers near Luminous Quasars](#),  
*The Astrophysical Journal*, 651, 61 (2006)  
<http://adsabs.harvard.edu/abs/2006ApJ...651...61H>
20. Zakamska N. L., Strauss M. A., Krolik J. H., Ridgway S. E., Schmidt G. D., Smith P. S., Heckman T. M., Schneider D. P., Hao L., Brinkmann J.:  
[Type II Quasars from the Sloan Digital Sky Survey. V. Imaging Host Galaxies with the Hubble Space Telescope](#),  
*The Astronomical Journal*, 132, 1496 (2006)  
<http://adsabs.harvard.edu/abs/2006AJ....132.1496Z>
19. Ptak A., Zakamska N. L., Strauss M. A., Krolik J. H., Heckman T. M., Schneider D. P., Brinkmann J.:  
[Type II Quasars from the Sloan Digital Sky Survey. IV. Chandra and XMM-Newton Observations Reveal Heavily Absorbed Sources](#),  
*The Astrophysical Journal*, 637, 147 (2006)  
<http://adsabs.harvard.edu/abs/2006ApJ...637..147P>
18. Zakamska N. L., Tremaine S.:  
[Constraints on the Acceleration of the Solar System from High-Precision Timing](#),  
*The Astronomical Journal*, 130, 1939 (2005)  
<http://adsabs.harvard.edu/abs/2005AJ....130.1939Z>
17. Collinge M. J., Strauss M. A., Hall P. B., Ivezić Ž., Munn J. A., Schlegel D. J., Zakamska N. L., Anderson S. F., Harris H. C., Richards G. T., Schneider D. P., Voges W., York D. G., Margon B.,

- Brinkmann J.:  
[Optically Identified BL Lacertae Objects from the Sloan Digital Sky Survey](#),  
*The Astronomical Journal*, 129, 2542 (2005)  
<http://adsabs.harvard.edu/abs/2005AJ...129.2542C>
16. Hao L., Strauss M. A., Fan X., Tremonti C. A., Schlegel D. J., Heckman T. M., Kauffmann G., Blanton M. R., Gunn J. E., Hall P. B., Ivezić Ž., Knapp G. R., Krolik J. H., Lupton R. H., Richards G. T., Schneider D. P., Strateva I. V., Zakamska N. L., Brinkmann J., Szokoly G. P.:  
[Active Galactic Nuclei in the Sloan Digital Sky Survey. II. Emission-Line Luminosity Function](#),  
*The Astronomical Journal*, 129, 1795 (2005)  
<http://adsabs.harvard.edu/abs/2005AJ...129.1795H>
15. Hao L., Strauss M. A., Tremonti C. A., Schlegel D. J., Heckman T. M., Kauffmann G., Blanton M. R., Fan X., Gunn J. E., Hall P. B., Ivezić Ž., Knapp G. R., Krolik J. H., Lupton R. H., Richards G. T., Schneider D. P., Strateva I. V., Zakamska N. L., Brinkmann J., Brunner R. J., Szokoly G. P.:  
[Active Galactic Nuclei in the Sloan Digital Sky Survey. I. Sample Selection](#),  
*The Astronomical Journal*, 129, 1783 (2005)  
<http://adsabs.harvard.edu/abs/2005AJ...129.1783H>
14. Zakamska N. L., Schmidt G. D., Smith P. S., Strauss M. A., Krolik J. H., Hall P. B., Richards G. T., Schneider D. P., Brinkmann J., Szokoly G. P.:  
[Candidate Type II Quasars from the Sloan Digital Sky Survey. III. Spectropolarimetry Reveals Hidden Type I Nuclei](#),  
*The Astronomical Journal*, 129, 1212 (2005)  
<http://adsabs.harvard.edu/abs/2005AJ...129.1212Z>
13. Zakamska N. L., Strauss M. A., Heckman T. M., Ivezić Ž., Krolik J. H.:  
[Candidate Type II Quasars from the Sloan Digital Sky Survey. II. From Radio to X-Rays](#),  
*The Astronomical Journal*, 128, 1002 (2004)  
<http://adsabs.harvard.edu/abs/2004AJ...128.1002Z>
12. Zakamska N. L., Tremaine S.:  
[Excitation and Propagation of Eccentricity Disturbances in Planetary Systems](#),  
*The Astronomical Journal*, 128, 869 (2004)  
<http://adsabs.harvard.edu/abs/2004AJ...128..869Z>
11. Beskin V. S., Zakamska N. L., Sol H.:  
[Radiation drag effects on magnetically dominated outflows around compact objects](#),  
*Monthly Notices of the Royal Astronomical Society*, 347, 587 (2004)  
<http://adsabs.harvard.edu/abs/2004MNRAS.347..587B>
10. Zakamska N. L., Strauss M. A., Krolik J. H., Collinge M. J., Hall P. B., Hao L., Heckman T. M., Ivezić Ž., Richards G. T., Schlegel D. J., Schneider D. P., Strateva I., Vanden Berk D. E., Anderson S. F., Brinkmann J.:  
[Candidate Type II Quasars from the Sloan Digital Sky Survey. I. Selection and Optical Properties of a Sample at  \$0.3 < Z < 0.83\$](#) ,  
*The Astronomical Journal*, 126, 2125 (2003)  
<http://adsabs.harvard.edu/abs/2003AJ...126.2125Z>
9. Abazajian K., Adelman-McCarthy J. K., Agüeros M. A., et al.:  
[The First Data Release of the Sloan Digital Sky Survey](#),

*The Astronomical Journal*, 126, 2081 (2003)  
<http://adsabs.harvard.edu/abs/2003AJ...126.2081A>

8. Strateva I. V., Strauss M. A., Hao L., Schlegel D. J., Hall P. B., Gunn J. E., Li L.-X., Ivezić Ž., Richards G. T., Zakamska N. L., Voges W., Anderson S. F., Lupton R. H., Schneider D. P., Brinkmann J., Nichol R. C.:  
[Double-peaked Low-Ionization Emission Lines in Active Galactic Nuclei](#),  
*The Astronomical Journal*, 126, 1720 (2003)  
<http://adsabs.harvard.edu/abs/2003AJ...126.1720S>
7. Fan X., Strauss M. A., Schneider D. P., et al.:  
[A Survey of  \$z < 5.7\$  Quasars in the Sloan Digital Sky Survey. II. Discovery of Three Additional Quasars at  \$z < 6\$](#) ,  
*The Astronomical Journal*, 125, 1649 (2003)  
<http://adsabs.harvard.edu/abs/2003AJ...125.1649F>
6. Zakamska N. L., Narayan R.:  
[Models of Galaxy Clusters with Thermal Conduction](#),  
*The Astrophysical Journal*, 582, 162 (2003)  
<http://adsabs.harvard.edu/abs/2003ApJ...582..162Z>
5. Sukhanov, L. P., Zheleznyakov, V. V., Zakamskaya, N. L.,  
[Nonempirical Models of Complexes with Linear H-Bonds](#)  
*Journal of Physical Chemistry (Russia)*, 75, 1972 (2001)  
Summary in English: <http://spie.org/Publications/Proceedings/Paper/10.1117/12.411934>

#### Selected non-refereed publications:

4. Zakamska N. L.:  
[Theory of Special Relativity](#),  
*ArXiv e-prints*, arXiv:1511.02121 (2015)  
<http://adsabs.harvard.edu/abs/2015arXiv151102121Z>
3. Gunn J. E., Carr M., Smee S. A., Orndorff J. D., Barkhouser R. H., Bennett C. L., Greene J. E., Heckman T., Karoji H., LeFevre O., Ling H.-H., Martin L., Ménard B., Murayama H., Prieto E., Spergel D., Strauss M. A., Sugai H., Ueda A., Wang S.-Y., Wyse R., Zakamska N.:  
[Detectors and cryostat design for the SuMIRE Prime Focus Spectrograph \(PFS\)](#),  
*Ground-based and Airborne Instrumentation for Astronomy IV*, 8446, 84464O (2012)  
<http://adsabs.harvard.edu/abs/2012SPIE.8446E..40G>
2. Zakamska N. L., Schulz A. E., Davis S. W., Heng K., Juric M., Kocsis B., Kuhlen M., Mandelbaum R., Mitchell J. L., Pan M., Pessah M. E., Rudd D. H., van de Ven G., Zheng Z.:  
[Challenges Facing Young Astrophysicists](#),  
*astro2010: The Astronomy and Astrophysics Decadal Survey*, 2010, (2009)  
<http://adsabs.harvard.edu/abs/2009astro2010P..69Z>
1. Tremaine S., Zakamska N. L.:  
[Extrasolar Planet Orbits and Eccentricities](#),  
*The Search for Other Worlds*, 713, 243 (2004)  
<http://adsabs.harvard.edu/abs/2004AIPC..713..243T>