

Yong Zheng (郑永)

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RESEARCH INTERESTS

4. Galaxy halo gas, aka circumgalactic medium
3. Baryonic cycles between galaxies and halos – gas inflows, outflows, and recycling
2. Synthetic observations of MW-mass galaxies with cosmological hydrodynamic simulations
1. Optical/UV spectroscopy, IFUs, Radio H I 21cm emission line observations

EDUCATION

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|---|-----------|
| 3. Columbia University, New York, NY, USA | 2012-2018 |
| Ph.D., Astronomy | |
| Thesis Project: <i>The Cycle of Gaseous Baryons between the Disk and Halo</i> | |
| Thesis Advisors: Mary E. Putman, Joshua E. G. Peek | |
| M.A., M.Phil., Astrophysics | |
| 2. Peking University, Beijing, China | 2008-2012 |
| B.S., Astronomy | |
| 1. Fuzhou No.1 High School, Fuzhou, Fujian, China | 2005-2008 |

AWARDS

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|---|-----------|
| 7. Miller Fellow, Miller Institute Postdoctoral Scholar Award, UC Berkeley | 2018-2021 |
| 6. Hubble Fellow, NASA Hubble Fellowship Program Postdoctoral Fellowship (Declined) | 2018 |
| 5. Finalist for MIT Pappalardo Fellowship | 2017 |
| 4. Dean's Fellowship, Graduate School of Arts and Science, Columbia University | 2012-2018 |
| 3. First Prize, Linbridge Prize for Excellent Undergraduate Research Projects in Astronomy and Astrophysics, Kavli Institute for Astronomy and Astrophysics, Beijing, China | 2011 |
| 2. Scholarship of Astronomical Alumni Fund for Excellent Undergraduates in Astronomy, Kavli Institute for Astronomy and Astrophysics, Beijing, China | 2011 |
| 1. Scholarship of National Astronomical Observatories, Chinese Academy of Sciences (NAOC) Beijing, China | 2010 |

PROPOSALS

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| 6. PI , W. M. Keck Observatory, DEIMOS, 2019B, U061, two half nights | 09/2019 |
| Title: Probing M33's Multiphase Disk-Halo Interface with Resolved Kinematics | |
| 5. CoI, Hubble Space Telescope, Cycle 27, GO 15880 (PI Roman-Duval), 77 orbits | 06/2019 |
| Title: METAL-Z: Metal Evolution, Transport, and Abundance at Low Metallicity (Z) | |
| 4. PI , Green Bank Telescope, 18B-376 | 11/2018 |
| Title: Observations of H I toward the halo of a dwarf galaxy | |
| 3. Co I, Hubble Space Telescope, Cycle 26, GO 15656 (PI Peek), 75 orbits | 10/2018 |
| Title: QuaStar: The first unobscured view of the Milky Way's Circumgalactic Medium | |
| 2. Co I, Green Bank Telescope, 18B-331 (PI Denny) | 02/2018 |
| Title: Constraining the Origin of A Very High-Velocity Cloud Toward M33 with GBT | |
| 1. PI , Hubble Space Telescope, Cycle 25, GO 15156, 32 orbits | 06/2017 |
| Title: Mapping Gas Flows from the Disk to the Circumgalactic Medium | |

TALKS & CONFERENCES

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| 27. (Upcoming) Invited Colloquium, SOFIA Team, NASA Ames Research Center,
Mountain View, California | 10/2019 |
| 26. Conference Talk, What matter(s) between galaxies: Unraveling the knots
in the Cosmic Web, Abbazia di Spineto, Italy | 06/2019 |
| 25. Invited Colloquium, University of Washington, Seattle | 05/2019 |
| 24. Invited Seminar Talk, Center for Astrophysics & Space Sciences, UC San Diego | 04/2019 |
| 23. Invited Colloquium, UC Santa Cruz, California | 02/2019 |
| 22. Lunch Talk, UC Berkeley, California | 09/2018 |
| 21. Dissertation Talk, 231st AAS Meeting, DC | 01/2018 |
| 20. Brown Bag Seminar, MIT, Boston, Massachusetts | 12/2017 |
| 19. Seminar, University of Chicago, Chicago, Illinois | 11/2017 |
| 18. UCSC FLASH Seminar, Santa Cruz, California | 11/2017 |
| 17. Caltech Tea Talk Seminar, Los Angeles, California | 11/2017 |
| 16. Invited Talk, Princeton Thunch Seminar, New Jersey | 09/2017 |
| 15. Conference talk, In & Out. What Rules the Galaxy Baryon Cycle?
Munich Institute for Astro- and Particle Physics, Munich, Germany | 07/2017 |
| 14. Conference talk, What Matter(s) Around Galaxies: Resolving the Physics of the
Circumgalactic Medium, Durham University, Durham, UK | 06/2017 |
| 13. Conference talk, Life Cycle of Metals Throughout the Universe: Celebrating 50 Years
of UV Astronomy, STScI Spring Symposium, Maryland | 04/2017 |
| 12. Invited Seminar, American Museum of Natural History, New York | 10/2016 |
| 11. Invited Talk, JILA Seminar, University of Colorado Boulder, Colorado | 02/2016 |
| 10. UCSC IMPS Winter Retreat, Santa Cruz, California | 02/2016 |
| 9. Conference talk, Observational Evidence of Gas Accretion onto Galaxies,
NRAO, Charlottesville, Virginia | 10/2015 |
| 8. Conference talk, Life Cycle of Gas in Galaxies: A Local Perspective,
ASTRON, Dwingeloo, Netherlands | 09/2015 |
| 7. Invited Talk, KIAA Seminar, Peking University, Beijing, China | 09/2015 |
| 6. NAOC Seminar, Beijing, China | 09/2015 |
| 5. Invited Talk, UCSC Seminar, Santa Cruz, CA | 05/2015 |
| 4. Conference Talk, The Role of Hydrogen in the Evolution of Galaxies, Kuching, Malaysia | 09/2014 |
| 3. Poster, AAS Winter Meeting, Maryland | 01/2013 |
| 2. Third Korean-Chinese Informal Workgroup Meeting on Astro-dynamics for
Stars and Galaxies, NAOC, Beijing, China | 12/2011 |
| 1. Symposium of Astronomy Undergraduate Students, Kavli Institute for
Astronomy and Astrophysics & Peking University, Beijing, China | 09/2011 |

ADVISING & TEACHING

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| 10. Advisor, S. L. Denny, Graduate Student, Florida State University
Project: GBT Follow-Up of a Very-High Velocity Cloud Near Wright's Cloud | 2018-present |
| 9. Co-advisor, H. Cook, Undergrad Summer Research/Thesis, Columbia University
Project: Column Density Comparison of H I in GALFA-H I and HI4PI Surveys | 2018-2019 |
| 8. Mentor, Society of Women in the Physical Sciences, UC Berkeley | Fall 2018 |
| 7. Co-advisor, A. Johnson, Undergrad Research, Columbia University
Project: H I limits of Local Group Dwarf Galaxies in GALFA-H I | Spring 2018 |
| 6. Co-advisor, L. Li, Undergrad Summer Research, Columbia University
Project: H I Fiber Structures Detected in GALFA-H I | Summer 2015 |

5. Lab Observing Instructor, Astronomy Labs I & II, Columbia Univ.	Fall 2014-Fall 2015
4. Lab Instructor, Stars, Galaxies and Cosmology (W1904), Columbia Univ.	Spring 2014
3. Lab Instructor, Earth, Moon, and Planets (W1903), Univ.	Fall 2013
2. Mentor, Astronomy Undergraduate Mentoring Program, Columbia Univ.	2015-2017
1. Mentor, Astronomy Peer Mentoring Program, Columbia Univ.	2015-2017

SCHOOLS & INTERNSHIPS

6. NAIC/NRAO Single-Dish & NAASC Interferometry Schools, Green Bank Telescope, Charlottesville, Virginia Project: Measuring H I Masses of Shocked Post-Starburst Galaxies Advisor: Robert F. Minchin	07/2015
5. Academic Writing for International Students, American Language Program, School of Professional Studies, Columbia University	Fall 2013
4. Graduate Internship, Very Large Array, NRAO, Socorro, New Mexico Project: Modeling the Non-thermal Radio Emission of a Classical Nova V1723Aql Advisors: Michael Rupen, Amy Mioduszewski	Summer 2013
3. English Pronunciation for International Teaching Fellows, School of Professional Studies, Columbia University	Fall 2012 & Spring 2013
2. Observational Astronomy School, Kavli Institute for Astronomy & Astrophysics, Peking University & National Astronomical Observatories, Chinese Academy of Sciences (NAOC), Beijing, China	10/2011
1. Summer Internship, Shanghai Astronomical Observatory, Shanghai, China	Summer 2011

PUBLIC OUTREACH

7. Berkeley Public Library, Talk: Galaxy's Climate System, when it rains, when it thunders, & when it dries up	06/2019
6. Astronomy on Tap, Lecture: Astronomy Version X	09/2017
5. Reading Team Math Program for Kindergarteners and 1st-grades from Low-income Families, Math Tutor for Kindergarteners Every Friday	2017-2018
4. Girls Science Day at Columbia, Experiment leader, Drafted Astronomy Experiment Proposal for High-School Girl Visits	10/2016
3. Columbia Public Lectures and Stargazing Nights, Volunteer and Telescope Operator Public Lecture: The Gas that Fills Invisible Space	2012 - 2018 03/2016
2. GOALS for Girls Summer Intensive Program, Aviation and Space Science Mentorship Day, The Intrepid Sea, Air Space Museum, New York Mentor for 8th/9th Grade Girls to Share Career Experience as a Woman in STEM	07/2016, 07/2017
1. World Science Festival, Brooklyn Bridge Park, New York, Telescope Volunteer	06/2016

LANGUAGES

福州话/Fuzhounese (Native), 汉语/Mandarin (Native), English (Fluent)