

Stacy Y. Kim

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Education

- 2019 **Ph.D. in Astronomy** (expected)
The Ohio State University, Columbus, OH
Thesis: Constraining Dark Matter Properties with Dwarf Galaxies and Galaxy Clusters
Advisor: Annika H.G. Peter
- 2013 **B.S. in Physics**
California Institute of Technology, Pasadena, CA
Thesis: X-Ray Ionization of Planet-Opened Gaps in Protostellar Disks
Advisor: Neal J. Turner

Honors & Awards

- 2018 Ann S. Tuttle Graduate Student Paper Prize (best 1st-author paper), *OSU Astronomy Dept*
- 2013 OSU Center for Cosmology and AstroParticle Physics Early Start Award
- 2013 University Fellowship for Graduate Studies, The Ohio State University
- 2013 Astronomy Graduate Recruitment Bonus, *OSU Astronomy Dept*
- 2009 National Merit Scholar

Research Appointments

- 2014– Graduate Research Associate, The Ohio State University
- 2013–2014 Graduate Research Fellow, The Ohio State University
- 2012–2013 Undergraduate Student Researcher, California Institute of Technology
- 2011–2012 Academic Part-Time Employee, Jet Propulsion Laboratory
- 2011, 2012 Summer Undergraduate Research Fellow, Jet Propulsion Laboratory
- 2010 Summer Undergraduate Research Fellow, California Institute of Technology

Teaching and Advising

- 2018– Co-advising Carton Zeng (junior OSU physics graduate student) on simulations of tidal stripping of subhalos around lens galaxies
- 2018– Graduate Student Mentor, OSU Polaris program
- 2016 Graduate Teaching Associate, “Methods of Observational Astronomy & Data Analysis” (ASTRON 3350), OSU

Presentations (as first author only)

- 2018 *There is No Missing Satellites Problem*, contributed talk, Substructure Lensing with Galacticus Workshop, Columbus, OH. Given 8/27/18.
- What is Dark Matter? Insights from Dwarf Galaxies and Galaxy Clusters*, **invited talk**, Open Group Seminar, University of Chicago, Chicago, IL. Given 6/29/18.
- There is No Missing Satellites Problem*, contributed talk, Near-Field Cosmology with the Dark Energy Survey's DR1 and Beyond Workshop, Chicago, IL. Given 6/28/18.
- There is No Missing Satellites Problem*, contributed poster, Dark Matter Detection and Detectability: Paradigm Confirmation or Shift?, KITP, Santa Barbara, CA. 4/30/18-5/4/18.
- There is No Missing Satellites Problem*, contributed talk, Quarks to the Cosmos (2018 April American Physical Society Meeting), Columbus, OH. Given 4/15/18.
- Constraining Self-Interacting Dark Matter with Galaxy Clusters*, contributed flash talk, Probing the Nature of Dark Matter with the Large Synoptic Sky Telescope Workshop, Pittsburgh, PA. Given 3/5/18.
- 2017 *Constraining Self-Interacting Dark Matter through Equal Mass Galaxy Cluster Mergers*, **invited talk**, Astrophysics Luncheon Seminar, Jet Propulsion Laboratory, La Cañada Flintridge, CA. Given 6/19/17.
- Constraining Self-Interacting Dark Matter through Equal-Mass Mergers of Galaxy Clusters*, **invited talk**, CCAPP Summer Seminar, The Ohio State University, Columbus, OH. 8/15/17.
- Constraining Self-Interacting Dark Matter through Equal Mass Galaxy Cluster Mergers*, contributed talk, TeVPA 2017, Columbus, OH. Given 8/7/17.
- 2016 *Constraining Self-Interacting Dark Matter through Equal Mass Galaxy Cluster Mergers*, contributed flash talk, Ohio Supercomputer Center Statewide Users Group Conference, Columbus, OH. Given 10/6/16.
- Constraining Self-Interacting Dark Matter through Equal Mass Galaxy Cluster Mergers*, contributed talk, COSMO-16, Ann Arbor, MI. Given 8/12/16.
- Constraining Self-Interacting Dark Matter: Insights from Equal Mass Mergers of Galaxy Clusters*, contributed poster, 227th Meeting of the American Astronomical Society, Kissimmee, FL. Given 1/7/16.

Service & Outreach

- 2014-2017 **Editor, Astrobites**
Wrote 30+ posts for [Astrobites](#), a blog by an international collaboration of graduate students that aims to make pioneering astronomy research accessible to undergraduates interested in pursuing astronomy. Posts summarized recent papers or topics relevant to pursuing astronomy as a career. Posts I have written can be found at astrobites.org/author/skim.
- 2015-2017 **Hiring Committee, Astrobites**
Read applications and selected new writers to join the Astrobites editorial staff.
- 2016-2018 **STEAM Lecture Series Co-Organizer**
Awarded ~\$25K from the STEAM Project (funded by the John Templeton Foundation and

the Fuller Theological Seminary) to host a 4-part discussion series on science and theology. Aided in inviting speakers, organizing seminars, and publicizing for keynote interdisciplinary discussions between scientists, philosophers, and theologians on topics spanning love, death, and the rise of AI.

2013– **Planetarium show presenter and developer, Arne Slettebak Planetarium, OSU**
Presented 40+ planetarium shows and helped develop extensive show content. Attended the 2014 Spitz Summer Institute to learn advance show development techniques.

2013–2014 **Volunteer, OSU Astronomy Public Roof Nights and Star Parties**

Other Skills & Qualifications

Programming

Python, C, Shell Script, L^AT_EX, Mathematica, Git (see my [GitHub](#))

Supercomputing (experience w/the following systems)

Pleiades cluster (245,536 cores, 7.24 Pflop/s) at the NASA Ames Research Center

Oakley cluster (8300 cores, 154 Tflop/s) at the Ohio Supercomputer Center

Ruby cluster (4800 cores, 125 Tflop/s) at the Ohio Supercomputer Center

Zodiac, Aurora & Halo (up to 1824 cores, 29 Tflop/s) at the Jet Propulsion Laboratory

In-house clusters (e.g. universe, arjuna) at the Department of Astronomy, OSU

Observing Experience

2014 MDM Observatory's 1.3m McGraw-Hill telescope
7 nights (4 as primary observer) with the CCDS optical spectrograph

Additional Training & Certifications

2014 **Spitz Institute 2014 – SciDome Presentation and Production Training**
1-week session on advanced techniques in developing content for planetariums with SciDome systems, held at Spitz, Inc., Chadds Ford, PA.

Languages

English (native speaker)

Korean (intermediate)