

Curriculum Vitae
Shea C. Garrison-Kimmel

Einstein Postdoctoral Fellow
Theoretical Astrophysics Including Relativity
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Education

- Ph.D. in Physics and Astronomy, University of California, Irvine *Awarded June 2015*
- M.S. in Physics and Astronomy, University of California, Irvine *Awarded Dec 2010*
- B.S. in Physics and Astronomy, concentration in Computer Science, Haverford College *Awarded May 2009*

Professional Appointments

- Einstein Fellow, California Institute of Technology *August 2015 - present*

Fellowships and Awards

- Einstein Postdoctoral Fellowship, NASA *Awarded July 2015*
- Chancellor's Club Dissertation Fellowship, University of California, Irvine *Awarded Dec 2014*
- Price Prize, Ohio State University *Awarded July 2014*
- Chancellor's Fellowship, University of California, Irvine *Awarded Feb 2009*
- Summer Research Fellowship, University of California, Irvine *Awarded Feb 2009*

Research Interests

Dwarf galaxy formation and theoretical cosmology, such as:

- Placing the Milky Way in its proper cosmological context as a member of the Local Group
- The impact of environment on dwarf galaxy evolution
- Numerical simulations of structure formation on both large and small scales
- The formation and evolution of the smallest galaxies in the Universe
- Comparing theoretical predictions with observational data to constrain baryonic processes

Teaching and Mentoring

Teaching experience

- University of California, Irvine, Teaching Assistant *Sept 2009 - June 2010 and March 2014 - June 2014*
- California State Summer School for Mathematics and Science, Teaching Assistant *July 2010, 2011, and 2012*
- Haverford College, Physics Clinic Tutor *Feb 2007 - May 2009*

Mentoring Experience

- Mentored Jaspreet Lally, at the time an undergraduate at University of California, Irvine, on how to run and analyze simulations of dwarf galaxies in isolation with a time varying potential to search for core formation, resulting in an authorship on Garrison-Kimmel et al., 2013.
- Mentored Kyle Lee, currently an undergraduate at Chapman University, on how to set up, simulate, and analyze cosmological simulations, including selecting isolated Milky Way hosts for zoom-in simulations, resulting in an authorship on Garrison-Kimmel et al., 2014.
- Mentored Emma Bardwell, an undergraduate at Case Western University, on a project exploring the relationship between halo mass and galaxy stellar mass, and the impact of scatter in that relation, resulting in an authorship on Garrison-Kimmel et al., 2016.
- Mentored Kris Burke, an undergraduate at University of California, Irvine, on simulating the cosmological evolution of galaxies with a central potential to explore the impact of the Milky Way disk on the substructure population with minimal CPU cost.

References

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