

## EDUCATION

**The University of California, Irvine**, Irvine, California, USA

▪ Doctorate of Philosophy (Ph.D.) in Physics

September 2017 – June 2023

**Georgia Institute of Technology**, Atlanta, Georgia, USA

▪ Bachelor of Science (B.S.) in Physics

January 2015 – May 2017

**Georgia State University Perimeter College**, Clarkston, Georgia, USA

▪ Associate of Science (A.S.) in Physics

June 2012 – December 2014

## PUBLICATIONS & PREPRINTS

7. **D. Baxter**, M. C. Cooper, M. Balogh, G. Rudnick “When the Well Runs Dry: Modeling Environmental Quenching in Massive Clusters at  $z \gtrsim 1$ ”, *Monthly Notices of the Royal Astronomical Society*, Submitted.
6. **D. Baxter**, M. C. Cooper “Isolating the Typical Quenching Timescale of Dwarf Satellite Galaxies Beyond the Local Group”, In Prep.
5. E. Kukstas, M. Balogh, I. McCarthy, Y. Bahé, G. De Lucia, P. Jablonka, B. Vulcani, **D. Baxter**, A. Biviano, P. Cerulo, J. Chan, M. C. Cooper, R. Demarco, A. Finoguenov, A. Font, C. Lidman, J. Marchioni, S. McGee, A. Muzzin, J. Nantais, L. Old, I. Pintos-Castro, B. Poggianti, A. Reeves, G. Rudnick, F. Sarron, R. van der Burg, K. Webb, G. Wilson, H. Yee, D. Zaritsky, “The GOGREEN Survey: A Critical Assessment of Environmental Trends in Cosmological Hydrodynamical Simulations at  $z \approx 1$ ”, *Monthly Notices of the Royal Astronomical Society*, vol. 518, no. 3, pp. 4782–4800, January 2023 (arXiv:2210.10803).
4. **D. Baxter**, M. C. Cooper, M. Balogh, T. Carelton, P. Cerulo, G. De Lucia, R. Demarco, S. McGee, A. Muzzin, J. Nantais, I. Pintos-Castro, A. Reeves, G. Rudnick, F. Sarron, R. van der Burg, K. B. Vulcani, G. Wilson, D. Zaritsky, “The GOGREEN Survey: Constraining the Satellite Quenching Timescale in Massive Clusters at  $z \gtrsim 1$ ”, *Monthly Notices of the Royal Astronomical Society*, vol. 515, no. 4, pp. 5479–5494, October 2022 (arXiv:2207.14302).
3. M. K. Rodriguez Wimberly, M. C. Cooper, **D. Baxter**, Boylan-Kolchin, J. S. Bullock, S. P. Fillingham, A. P. Ji, L. V. Sales, J. D. Simon, “Sizing from the Smallest Scales: The Mass of the Milky Way”, *Monthly Notices of the Royal Astronomical Society*, vol. 513, no. 4, pp. 4968–4982, July 2022 (arXiv:2109.00633).
2. **D. Baxter** M. C. Cooper, S. P. Fillingham, “A Machine Learning Approach to Measuring the Quenched Fraction of Low-Mass Satellites Beyond the Local Group,” *Monthly Notices of the Royal Astronomical Society*, vol. 503, no. 2, pp. 1636–1645, May 2021 (arXiv:2102.05050).
1. S. Mahajan, M. Tennenbaum, S. N. Pathak, **D. Baxter**, X. Fan, P. Padilla, C. Anderson, A. Fernandez-Nieves, M. P. Ciamarra, “Reverse Janssen Effect in Narrow Granular Columns,” *Physical Review Letters*, vol. 124, no. 12, pp. 128002, February 2020 (arXiv:2005.14404).

## ACADEMIC AWARDS

- NSF Astronomy and Astrophysics Postdoctoral Fellowship July 2023
- UC Chancellor’s Postdoctoral Fellowship July 2023
- National Osterbrock Leadership Program Fellowship June 2020
- LSSTC Data Science Fellowship April 2019
- Eugene Cota-Robles Fellowship September 2017
- Tulsa Community Foundation: AMC Cares Scholarship July 2015
- Georgia Hope Scholarship January 2014

<b>SELECT PRESENTATIONS</b>	<ul style="list-style-type: none"> <li>▪ Conference for Emerging Black Academics in STEM, Caltech, CA (May 2023)</li> <li>▪ AAS 240th Meeting, Pasadena, CA (June, 2022)</li> <li>▪ Astronomy Seminar, The University of Kansas, Lawrence, KS (April 8, 2022)</li> <li>▪ Little Galaxies Journal Club, The Ohio State University, Columbus, OH (March 29, 2021)</li> </ul>
<b>TEACHING EXPERIENCE</b>	<p><b>Ardent Academy for Gifted Youth</b>, Irvine, California, USA          December 2019 – December 2019</p> <ul style="list-style-type: none"> <li>▪ Physics Instructor             <ul style="list-style-type: none"> <li>• Physics Olympiad Winter Bootcamp</li> </ul> </li> </ul> <p><b>UC, Irvine Department of Physics and Astronomy</b>, Irvine, California, USA          September 2018 – June 2019</p> <ul style="list-style-type: none"> <li>▪ Teaching Assistant             <ul style="list-style-type: none"> <li>• Physics 20D (Space Science) Fall 2018</li> <li>• Physics 20B (Cosmology) Winter 2019</li> <li>• Physics 20E (Life in the Universe) Spring 2019</li> </ul> </li> </ul>
<b>OBSERVING PROPOSALS AND GRANTS</b>	<p>Co-Investigator</p> <ul style="list-style-type: none"> <li>• Keck/KCWI - Smudges in Stripe 82: A KCWI Survey of UDGs in the Field (2020-2021, 5 nights)</li> <li>• Keck/DEIMOS - Deeper than DEEP: a DEIMOS Survey of the JWST Cosmic Evolution Early Release Science Field (2020, 3.5 nights)</li> </ul>
<b>OBSERVING EXPERIENCE</b>	<p>Keck Observatory</p> <ul style="list-style-type: none"> <li>• DEIMOS: 16</li> <li>• KCWI: 4.5</li> </ul>
<b>TECHNICAL SKILLS</b>	$\text{\LaTeX}$ , Python (Astropy, Keras, NumPy, Matplotlib, Pandas, Scikit-Learn, SciPy), Machine Learning (PyTorch, Tensorflow), Bayesian Statistics, GitHub, Bash, SQL, Unix/macOS, Mathematica
<b>CERTIFICATES</b>	<ul style="list-style-type: none"> <li>▪ Certification in Course Design by UCI Division of Teaching Excellence and Innovation</li> <li>▪ Certification for the Integration of Research, Teaching and Learning by UCI Division of Teaching Excellence and Innovation</li> <li>▪ Mentoring Excellence Program Certification by UCI Graduate Division</li> </ul>
<b>OUTREACH &amp; SERVICE</b>	<p><b>Computational Research Access Network (CRANE)</b>, Irvine, California, USA          Instructor &amp; Teaching Assistant August 2022 –</p> <p><b>UCI Physics and Astronomy Community Excellence Peer Mentoring Program</b>, Irvine, California, USA          Co-Chair &amp; Administrator August 2020 – June 2023</p> <p><b>UCI Observatory - Astronomy Outreach Program</b>, Irvine, California, USA          Co-Organizer October 2018 – March 2020</p> <p><b>UCI Physics Graduate Caucus</b>, Irvine, California, USA          Social Event Chair October 2018 – March 2020</p> <p><b>Good Samaritan Health Center</b>, Atlanta, Georgia, USA          Spanish Interpreter January 2017 – April 2017</p>
<b>LANGUAGES</b>	<ul style="list-style-type: none"> <li>▪ English: Native language</li> <li>▪ Spanish: Fluent</li> <li>▪ French: Intermediate</li> </ul>