

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
 - Concentration: Astrophysics
 - Minor: Spanish
 - Graduated with Highest Honors

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 “Constraining the Satellite Quenching Timescale in Galaxy Groups at $z \gtrsim 0.8$ ”, In Prep.
6. **D. Baxter**, M. C. Cooper, M. Balogh, G. Rudnick, G. De Lucia, R. Demarco, A. Finoguenov, B. Forrest, A. Muzzin, A. Reeves, F. Sarron, B. Vulcani, G. Wilson, D. Zaritsky, “When the Well Runs Dry: Modeling Environmental Quenching of High-mass Satellites in Massive Clusters at $z \gtrsim 1$ ”, *Monthly Notices of the Royal Astronomical Society*, vol. 526, no. 3, pp. 3716–3729, October 2023 (arXiv:2306.09404).
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: 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
INVITED TALKS	▪ The Center for Relativistic Astrophysics Seminar, Georgia Institute of Technology, Atlanta, GA (Nov 2023)	
	▪ Astronomy Colloquium, The University of California, San Diego, San Diego, CA (Oct 2023)	
	▪ The Baryon Cycle of Protocluster Galaxies, Leiden, the Netherlands (Oct 2023)	
	▪ First Structures in the Universe 2023, Paris, France (Sep 2023)	
	▪ Conference for Emerging Black Academics in STEM, Caltech, CA (May 2023)	
	▪ Astronomy Seminar, The University of Kansas, Lawrence, KS (April 8, 2022)	
	▪ Little Galaxies Journal Club, The Ohio State University, Columbus, OH (March 29, 2021)	
TEACHING EXPERIENCE	Ardent Academy for Gifted Youth , Irvine, California, USA	
	▪ Physics Instructor	December 2019 – December 2019
	• Physics Olympiad Winter Bootcamp	
	UC, Irvine Department of Physics and Astronomy , Irvine, California, USA	
	▪ Teaching Assistant	September 2018 – June 2019
OBSERVING PROPOSALS AND GRANTS	Co-Investigator	
	• Keck/KCWI - Smudges in Stripe 82: A KCWI Survey of UDGs in the Field (2020-2021, 5 nights)	
	• Keck/DEIMOS - Deeper than DEEP: a DEIMOS Survey of the JWST Cosmic Evolution Early Release Science Field (2020, 3.5 nights)	
OBSERVING EXPERIENCE	Keck Observatory	
	• DEIMOS: 16	
	• KCWI: 4.5	
TECHNICAL SKILLS	L ^A T _E X, Python (Astropy, Keras, NumPy, Matplotlib, Pandas, Scikit-Learn, SciPy), Machine Learning (PyTorch, Tensorflow), Bayesian Statistics, GitHub, Bash, SQL, Unix/macOS, Mathematica	
CERTIFICATES	▪ Certification in Course Design by UCI Division of Teaching Excellence and Innovation	
	▪ Certification for the Integration of Research, Teaching and Learning by UCI Division of Teaching Excellence and Innovation	
	▪ Mentoring Excellence Program Certification by UCI Graduate Division	
OUTREACH & SERVICE	Computational Research Access NEtwork (CRANE) , Irvine, California, USA	
	▪ Instructor & Teaching Assistant	August 2022 –
	UCI Physics and Astronomy Community Excellence Peer Mentoring Program , Irvine, California, USA	
	▪ Co-Chair & Administrator	August 2020 – June 2023
	UCI Observatory - Astronomy Outreach Program , Irvine, California, USA	
	▪ Co-Organizer	October 2018 – March 2020

UCI Physics Graduate Caucus, Irvine, California, USA

- Social Event Chair

October 2018 – March 2020

Good Samaritan Health Center, Atlanta, Georgia, USA

- Spanish Interpreter

January 2017 – April 2017

LANGUAGES

- English: Native language
- Spanish: Fluent
- French: Intermediate