

Helen Meskhidze

emeskhid@uci.edu ◊ 919.601.3147

EDUCATION

University of California, Irvine

PhD in Philosophy

Dissertation advisor: J. Weatherall

MA in Philosophy

Irvine, California

September 2017 - Present

September 2017 - September 2020

Western University

MA in Philosophy

Thesis: "Simulationist's Regress in Laboratory Astrophysics"

Thesis advisor: J. Sullivan

London, Ontario

September 2016 - August 2017

Elon University

BA in Philosophy, BS in Physics, Minor in French

Honors: Phi Beta Kappa Scholar, Lumen Scholar, Honors Fellow, Presidential Scholar

Honors Thesis: "Developing an Atlas of Starburst Galaxy Emission Line Equivalent Widths"

Thesis advisor: C. Richardson

Elon, North Carolina

August 2012 - May 2016

PUBLICATIONS

Meskhidze, H. (2021), "Can machine learning provide understanding?: How Cosmologists Use Machine Learning to Understand Observations of the Universe", *Erkenntnis* 86, (5).

Wilson, S.P., Phillips, J.C., **Meskhidze, H.**, Lockard, C., Felten, P., McGowan, S., Bloch-Schulman, S. (2020). *From Novelty to Norm: Moving beyond exclusion and double justification problem in student-faculty partnerships* in *The Power of Student-Staff Partnerships: Revolutionizing Higher Education*, edited by Lucy Mercer-Mapstone and Sophia Abbot. Elon University Center for Engaged Teaching Open-Access Series.

Meskhidze, H., Lockard, C., Bloch-Schulman, S. (2019). "An Invitation to Scholarly Teaching: Annotated Bibliography of Resources for the Science of Learning," *American Association of Philosophy Teachers Studies in Pedagogy*, 5.

Jones, O.C., Maclay, M.T., Boyer, M.L., Meixner, M., McDonald, I., **Meskhidze, H.** (2018). "Near-infrared Stellar Populations in the Metal-poor, Dwarf Irregular Galaxies Sextans A and Leo A," *Astrophysical Journal*, 854 (117).

Lockard, C., **Meskhidze, H.**, Wilson, S., Bloch-Schulman, S., Batchelor, N., Cahill, A.J. (2017). "Using Focus Groups to Explore the Underrepresentation of Female-Identified Undergraduate Students in Philosophy," *Feminist Philosophy Quarterly* 3, (4).

Meskhidze, H., Richardson, C.T. (2017) "An Atlas of Star-forming Galaxy Equivalent Widths," *Astrophysics and Space Science*, 362, 200.

Richardson, C.T., Allen, J.T., Baldwin, J.A., Hewett, P.C., Ferland, G.J., Crider, A., **Meskhidze, H.** (2015) "Interpreting the Ionization Sequence in Star-Forming Galaxy Emission-Line Spectra," *Monthly Notices of the Royal Astronomical Society*, 458, 988.

INVITED TALKS

- **Meskhidze, H.** “(What) Do we learn from code comparisons? A case study of implementations of self-interacting dark matter,” Philosophy of Dark Matter Workshop, 2021, online.

CONFERENCE PRESENTATIONS

- **Meskhidze, H.** “Energy Conditions in Theories of Modified Gravity,” Foundations of Physics, upcoming (rescheduled due to Covid-19).
- **Meskhidze, H.** “Energy Conditions in Theories of Modified Gravity,” Philosophy of Science Association, upcoming (rescheduled due to Covid-19), Baltimore.
- **Meskhidze, H.** “Cosmology in Silico,” British Society for the Philosophy of Science Conference, 2019, Durham, U.K.
- **Meskhidze, H.** “The explanatory and methodological roles of new simulation methods in cosmology” Philosophy of Logic, Mathematics, and Physics Graduate Conference, 2019, London, Ontario.
- **Meskhidze, H.** “Can Machine Learning Provide Understanding?: How Cosmologists Use Machine Learning to Explain Observations of the Universe,” Philosophy of Science Association Conference, 2018, Seattle, Washington.
- **Meskhidze, H.** “Simulationist’s Regress in Laboratory Astrophysics,” Super-PAC: Early Career Workshop in Philosophy of Astrophysics and Cosmology, 2017, Pittsburgh, Pennsylvania.
- **Meskhidze, H.**, Richardson, C.T., “Investigating Starburst Galaxy Emission Line Equivalent Widths,” American Astronomical Society, 2016, AAS - Kissimmee, Florida.
- **Meskhidze, H.** “Queering Nature: How might we see queerness in the physical realm?” 2015, Canadian Society for Women in Philosophy - Regina, Canada.
- Bloch-Schulman, S., Cahill, A. J., Batchelor, N., **Meskhidze, H.**, Lockard, C., Wilson, S., “Outside the Pipeline: A Student-Faculty Collaborative Examination of How to Increase Engagement of Women in an Undergraduate Philosophy Program,” 2015, Hypatia/American Philosophical Association - Villanova, Pennsylvania.
Funding awarded by Hypatia and Elon’s Center for the Advancement of Teaching and Learning.
- Bloch-Schulman, S., Cahill, A.J., Batchelor, N., **Meskhidze, H.**, Lockard, C., Wilson, S., “Addressing the Underrepresentation of Women Undergraduates in Philosophy” 2014, International Society for the Scholarship of Teaching and Learning, G06 - Quebec City, Canada.
- **Meskhidze, H.**, Richardson, C.T., Ferland, G.J., “An Atlas of Starburst Galaxy Emission Lines,” 2015, American Astronomical Society, 22525106M.
- **Meskhidze, H.**, Masdea, C.J., Lazzati, D., Lopez-Camara, D. “Modeling the Composition and Emissions of Gamma-Ray Burst Jet Cocoons,” 2014, International Conference of Physics Students, P4.4.
- **Meskhidze, H.**, Masdea, C.J., Lazzati, D., Lopez-Camara, D. “Modeling the Composition and Emissions of Gamma-Ray Burst Jet Cocoons,” 2014, American Astronomical Society.

GRANTS, SCHOLARSHIPS, AND AWARDS

Cascading Mentorship Fellow	2021
University of California, Irvine	\$6,000
Graduate Student Fellow	2020, 2021
Division of Teaching Excellence and Innovation, University of California, Irvine	\$5,000/year
Pedagogical Fellowship	2019
University of California, Irvine	\$2,000
Clifton Memorial Paper Prize	2019
Department of Philosophy, Western University	
Provost PhD Fellowship	2017
University of California, Irvine	\$20,000
Chair's Entrance Scholarship	2016
Faculty of Arts and Humanities, Western University	\$1,000
Fulbright U.S. Student Grant Recipient	2016
Fulbright Commission, United Kingdom	<i>declined</i>
Rhodes Scholarship Finalist, District 6	2016
Society of Physics Students Academic Scholarship	2015
Science Systems and Applications, Inc.	\$2,000
Departmental Service Award	2015
Elon University, Department of Physics	
Philosophical Excellence Award	2015
Elon University, Department of Philosophy	
Undergraduate Research Award	2014
Elon University, Department of Physics	
John Dewey Emerging Scholar Award	2014
Elon University, Department of Philosophy	
Outstanding Undergraduate Research Award	2014
National Society of Physics Students	\$3,000
Contribution published in the Society of Physics Students quarterly magazine	2014
<i>The SPS Observer</i> - "The Physicists in Heidelberg"	
Best Undergraduate Poster Presentation	2013
Society of Physics Students Annual Meeting	\$100
Elon University Lumen Scholarship for Undergraduate Research	2014-2016
Faculty of Arts and Sciences, Elon University	\$15,000
Elon University Honors Fellows Scholarship	2012-2016
Elon Honor's Fellows Program	\$54,000
Elon Presidential Scholarship	2012-2016
Faculty of Arts and Sciences, Elon University	\$24,000
Elon University President's List	2012-2016

TEACHING EXPERIENCE

Instructor of Record

LPS 60: Making Modern Science

Summer Session II 2021, Online

Designed course syllabus, prepared online Canvas course site, prepared synchronous and asynchronous lecture content and lesson plans, moderated course Discord, held office hours, designed weekly reading guides and response prompts, supervised graduate TAs. Number of students TBD.

LPS 30: Introduction to Symbolic Logic Spring 2021, Online
 Designed course syllabus, prepared online Canvas course site, prepared asynchronous lecture content, moderated course Discord, held office hours, designed weekly exercises on **Carnap**, supervised graduate TAs and held weekly meetings with them. 90 students.

Teaching Assistant Training Fall 2020, Online
 Designed and led trainings on active learning, diversity, grading, and remote learning for 10 graduate students in philosophy.

Teaching Assistant

University of California, Irvine

Clinical Psychology (Prof. J. Lewis) Winter 2020
 Graded assignments, projects, and exams for 90 students; held weekly office hours.

Soc Sci H1E: The Good Life (Profs. C. O'Connor & J. Weatherall) Spring 2019
 Led discussion sections and review sessions, held office hours, created rubrics for exams, and graded assignments and exams for 60 students

LPS 91: Philosophy of Sex (Prof. C. O'Connor) Winter 2018, 2019
 Led discussion sections and review sessions, held office hours, created rubrics for assignments, graded assignments and papers for 50-80 students

LPS 30: Introduction to Symbolic Logic (Prof. C. Mitsch) Spring 2018
 Led discussion sections, held office hours, and graded exams for 40 students.

Western University

WST 1020: Introduction to Women's Studies (Prof. K. Verwaayen) 2016-2017
 Led discussion sections and graded papers and exams for 40 students.

GRADUATE COURSEWORK

(c) = completed for credit; (a) = audited

University of California, Irvine

General Relativity Theory I (a)	J. Weatherall
Geometry of Spacetime (c)	J.B. Manchak
Spacetime Singularities (c)	J.B. Manchak & J. Weatherall
Philosophy of Cosmology (c)	J. Weatherall
Cosmology (c)	M. Kaplinghat
Quantum Mechanics (c)	J. Barrett
Scientific Explanation (c)	L. Ross
Philosophy of Modeling (c)	C. O'Connor
History of Analytic Philosophy I (c)	J. Heis
Kant's Philosophy of Science (c)	J. Heis
Probability and Determinism (c)	J.B. Manchak
Philosophy of Mathematics (c)	P. Maddy
Incompleteness (c)	J. Schatz
Metalogic (c)	J.E. Galebach
Set Theory (c)	S. Walsh
University Studies: Advanced Pedagogy (c)	D. Mann
Scientific Realism (a)	K. Stanford
Social Hinge Epistemology (c)	A. Coliva & A. Boncompagni
General Relativity Theory II (a)	J. Weatherall

Philosophy of Cosmology (a)	J. Weatherall & C. Smeenk
History of Analytic Philosophy II (a)	J. Heis
Machine Learning and Statistics for Physicists (a)	D. Kirkby

Western University

Philosophy of Cosmology (c)	C. Smeenk
Philosophy of Scientific Experimentation (c)	J. Sullivan
Philosophy of Science (c)	R. DiSalle
Scientific Realism (c)	S. Psillos
Philosophy of Biology (c)	G. Barker; B. Sinclair
Words and Things (c)	K. Mooney
Feminist Bioethics (a)	C. McLeod

CONFERENCE AND WORKSHOP ORGANIZATION

Philosophical Aspects of Simulations in Cosmology, Co-organizer Online, Aug 2021
 Workshop bringing together physicists and philosophers to discuss code comparisons and opacity of simulations in astrophysics and cosmology

Wonder Philosophy Workshop, Co-organizer and presenter Online, Sept 2020
 Workshop developed and facilitated by graduate students to assist undergraduate students from underrepresented backgrounds in their applications to philosophy PhD programs.

AAPT Workshop on Graduate Pedagogy, Local organizer UCI, November 2019
 Workshop facilitated by the American Association of Philosophy Teachers to develop graduate students' disciplinary teaching and learning skills.

Women in Academia, Organizing Committee UCI, May 2019
 Conference about women in academia also organized to facilitate networking and mentoring between current graduate students and alumni of UCI.

Philosophy of Logic, Math, and Physics Graduate Conference, Organizing Committee UWO, June 2017

Active Materials Project Summer School, Organizing Assistant Georgetown, June 2017

PROFESSIONAL SERVICE

Graduate student representative UCI, 2020-2021
 Representing the graduate community at monthly faculty meetings, facilitating visit weekend for prospective students. Served on departmental climate committee.

Th!nk: Philosophy for early adolescents Orange County Schools, 5 semesters in 2018-2021
 Facilitated philosophical discussions with groups of 4-8 5th graders once a week for 4 weeks.

Ad hoc reviewer
Philosophy of Science
European Journal for Philosophy of Science
Minds and Machines
Social Epistemology

WORKSHOP ATTENDANCE

Philosophy of Dark Energy Workshop	March 2019, UCI
Rotman Summer Institute in Philosophy of Cosmology	June 2018, Goderich, Ontario

Seven Pines Symposium: What Counts as Evidence? May 2018, Stillwater, Minnesota

PROFESSIONAL DEVELOPMENT

Summer Teaching Apprenticeship Program	Summer, 2021, UCI
Certificate in Cascading Mentorship	Spring 2021, UCI
Certificate in Remote Instruction	Summer 2020, UCI
Teaching Assistant Diversity Training	Jan 2020, UCI
Certificate in Teaching Excellence	Fall 2019, UCI
Course Design Certificate Program	Spring 2019, UCI
Teaching Assistance Training Program	September 2017, UCI
Teaching Assistance Training Program	September 2016, Western University

MEMBERSHIPS AND AFFILIATIONS

Rotman Institute of Philosophy, Western University	2016
Phi Beta Kappa, Academic Honor Society	2015
Sigma Pi Sigma, Physics Honors Society	2015
Phi Kappa Phi, Academic Honor Society	2014
Pi Delta Phi, French Honor Society	2013
Phi Eta Sigma, Academic Honor Society	2013