Curriculum Vitae

Shannon Sylvie Abelson

Stanford University
McCoy Family Center for Ethics in Society
Doerr School of Sustainability
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Personal Website

Current Affiliations

Postdoctoral Fellow Stanford University 2023-present

McCoy Center for Ethics in Society/ Doerr School for Sustainability

Associate Member, NANOGrav 2022-present

Member, Next Generation Event Horizon Telescope 2023-present

Research Affiliate, Center for Space Governance 2023

Education

Ph.D. Philosophy Indiana University, Bloomington, 2023

Minor: History and Philosophy of Science

Graduate Certificate, Astronomy Swinburne University, 2021

Master of Arts, Philosophy Virginia Tech, 2015

Bachelor of Arts Philosophy, German Stetson University, 2013

Magna Cum Laude Minor in History

AOS: Philosophy of Astrophysics and Astronomy, Space Environmentalism,

Environmental Philosophy

AOC: Epistemology of Science, Space Environmentalism, General Philosophy of

Science

Publications

- (Forthcoming) "Simulation and Experiment Revisited: Temporal Data in Astronomy and Astrophysics"
 - Edited Volume, *Philosophy of Astrophysics: Stars, Simulations, and the Struggle to Determine What Is Out There*, Synthese Library Studies in Epistemology, Logic, Methodology, and Philosophy of Science, Eds. Nora Boyd and Siska de Baerdemaeker.
- (2022) "<u>Variety of Evidence in Multimessenger Astronomy</u>," *Studies in History and Philosophy of Science* 94: 133-142.
- (2022) "The Fate of Tensor-Vector-Scalar Alternative Gravity," Foundations of Physics 52 (1): 1-19.

Works in Progress

- Eliminative Reasoning in Astronomy and Astrophysics (*under review*)
- Machine Learning for Data-Driven Astronomy and Astrophysics (manuscript)
- First Come, First Served? Reevaluating Satellite Rights (*manuscript*)

Research Presentations

Invited Presentations

Black Hole Initiative
 Invited Colloquium Series
 Harvard University
 "Eliminative Reasoning in Astronomy and Astrophysics"

March 14, 2022

 Lichtenberg Group for History and Philosophy of Physics Invited Colloquium Series University of Bonn
 "The Fate of Tensor-Vector-Scalar Alternative Gravity" April 27, 2021

• IU History and Philosophy of Science Fall Forum "Testing Modified Gravity Models November 29, 2018

Refereed Presentations

 Space Traffic Management Conference Austin, TX March 1-2, 2023

"Attribution of Environmental Impact from Space Traffic: Challenges and Lessons from Climate Change Attribution"

• Philosophy of High Energy Physics

March 26-27, 2022

Early Career Workshop

University of Pittsburgh

"Simulation and Experiment Revisited: Temporal Data in

Astronomy and Astrophysics"

• AGPhil: Arbeitsgruppe Philosophie der Physik

March 21, 2022

der Deutschen Physikalischen Gesellschaft e.V., Frühjahrstagung

(Working Group: Philosophy of Physics

The German Physical Society, Spring Meeting)

Heidelberg, Germany

"Holistic Eliminative Reasoning for Astronomy and Astrophysics"

• American Philosophical Association: Central Division

February 25, 2022

Chicago, IL

"Simulation and Experiment Revisited: Temporal Data in

Astronomy and Astrophysics"

• Indiana Philosophical Association

November 13, 2021

"The Fate of Tensor-Vector-Scalar Alternative Gravity"

• 2020/2021 Philosophy of Science Association Meeting Poster Forum, Baltimore, MD

November 2020/2021

"Reducing Uncertainty in Multimessenger Astronomy

Using Simulation"

(&HPS8) Arlington, VA

July 15-17, 2020

"Testing Modified Models of Gravity"

Moved to Asynchronous due to Covid-19

https://www.youtube.com/watch?v=gS1wb6Zdno0

• 8th Integrated History and Philosophy of Science Conference

• Society for Philosophy of Science in Practice East Lansing, MI.

July 7-10, 2020

"Variety of Evidence in Multimessenger Astronomy"

Cancelled due to Covid-19

 American Association of Philosophy Teachers/ American Philosophical Association Central Meeting 2020 Teaching Hub Poster Forum

"Teaching Climate Ethics Using a Model Climate Forum"

• History of Science Society Annual Meeting

November 10, 2017

February 28, 2020

Toronto, ON "Einstein And the Michelson-Morley Experiment: The Context of Justification Revisited"

 Thirteenth Biennial History of Astronomy Workshop University of Notre Dame
 "Explanation and Unification: A Closer Look at Aristotle's Astronomical Model" July 8, 2017

 Arizona State University Graduate Philosophy Conference "Moritz Schlick on Confirmation, Observation, and Conceptual Frameworks"

Awards Presentations

 2020 Nelson Dissertation Fellowship Lecture Indiana University Bloomington "Variety of Evidence in Multimessenger Astronomy" September 18, 2020

Academic Work Experience

Instructor of Record

• Instructor of Record, Business and Morality
Original course designed entitled, "Business and Sustainability"
that examined ethical business practice in light of concerns in
the domain of broad sustainability, including environmental,
economic, social, and cultural sustainability.

Spring 2021

Instructor of Record- Introduction to Ethics
 Original course designed entitled, "Climate Ethics" that
 examined contemporary ethical concerns related to global
 climate change.

Spring 2019

Instructor of Record- Introduction to Ethics
 Original course designed entitled, "Ethics and Star Trek" that
 examined classical ethical theories using supplemental science
 fiction case studies.

Spring 2018

Standalone Instructor

Associate Instructor, Public Speaking

Fall 2022

Associate Instructor/Research Assistant

•	Associate Instructor, Bioethics	Fall 2020
•	Associate Instructor- Symbolic Logic	Fall 2018
•	Research Assistant to Professor Sandra Shapshay	Fall 2017
•	Associate Instructor- Philosophical Methods	Spring 2017
•	Associate Instructor- Introduction to Ethics	Fall 2016
•	Graduate Teaching Assistant- Morality and Justice	Spring 2015
•	Graduate Teaching Assistant- Morality and Justice	Fall 2014
•	Graduate Teaching Assistant- Knowledge and Reality	Spring 2014
•	Graduate Teaching Assistant- Knowledge and Reality	Fall 2013

Grader and Tutor

•	Grader and Tutor, Virtue Ethics	Fall 2021
•	Grader and Tutor, Classics in Philosophy of Art	Spring 2021
•	Grader and Tutor, Medieval Philosophy	Fall 2020
•	Grader and Tutor, Virtue Ethics	Spring 2020
•	Grader and Tutor, Medieval Philosophy	Fall 2019

Professional Development and Professional Experience

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•	Associate Member, NANOGrav	2022-present
•	Public Speaking Pedagogy Training Module (35 hours)	August 8-12, 2022
•	Administrative Assistant, Haven Health Care	2022-present
•	Representative, Department Climate Committee	2021-2022
	IU Department of Philosophy	
•	Certificate, R Programming	August 2020
•	2020 Indiana Black Expo Education Conference	July 14-16, 2020
•	Referee, Studies in History and Philosophy of Modern Physics	s 2019-present
•	Chair, session on "Models in Science"	November 5, 2018
	2019 Philosophy of Science Association Meeting	
•	Co-President, Virginia Tech Graduate Philosophy Club	Fall 2014- Spring 2015
	Planned and organized the department's annual graduate confe	erence.
•	Commenter	November 15, 2014
	Virginia Tech Graduate Conference on Pragmatism	
•	Philosophy Department Delegate	Fall 2013- Spring 2014
	Virginia Tech Graduate Assembly	

Awards and Fellowships

•	President's Diversity Dissertation Fellowship, Indiana University	2021-2022
•	Ewing Graduate Essay Prize	2021

•	James B. Nelson Dissertation Fellowship, Indiana University	2019- 2020
•	Bo and Lynn Clark Graduate Essay Prize	2017
•	Academic Excellence Award, Indiana University	2016
•	College of Arts and Sciences Fellowship, Indiana University	2015- 2016
•	Phi Beta Kappa, National Academic Honor Society	2014- present
•	Marjorie Grene Prize in Philosophy, Virginia Tech	2015
•	Ronald L. and Margaret Smith Hall Philosophy Award	2013
•	Omicron Delta Kappa, National Leadership Honors Society	2013- present

Sample Syllabi Available For:

- Business and Sustainability (200 level)
- Climate Ethics (100 level)
- Star Trek and Ethics (100 level)
- Introduction to Philosophy of Science (100 level)
- Introduction to Ethical Theory (100 level)
- Introduction to Philosophy: Metaphysics and Epistemology (100 level)
- Philosophy of Technology (3-400 level and above)
- Space Sustainability (2-300 level)
- Immanuel Kant (300 level and above)
- History of Analytic Philosophy (200 level)