

MIKE D. SCHNEIDER

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Areas of Specialization

History and Philosophy of Physics (especially Cosmology), Social Epistemology of Science, General Philosophy of Science

Areas of Competence

Values in Science, Philosophy of Complexity, Epistemology (Traditional and Social)

Appointments

University of Missouri (Mizzou)

Assistant Professor, Department of Philosophy, Spring 2023-ongoing

University of Illinois at Chicago

Postdoctoral Research Associate, Department of Philosophy (Cosmology Beyond Spacetime Project), 2021/2022 AY

University of Pittsburgh

Postdoctoral Fellow, Center for Philosophy of Science, 2020/2021 AY

Collaborations and Visiting Appointments

Bielefeld University, Center for Interdisciplinary Research (ZiF)

Fellow, for the project "The Epistemology of Evidence-Based Policy", Spring 2023

Next Generation Event Horizon Telescope Collaboration

Member, in the "History, Philosophy and Culture" working group, Spring 2022-ongoing

Education

Ph.D. Philosophy (LPS), Physics Emphasis, *University of California, Irvine*, August 2020

Committee: James Owen Weatherall (chair), Jeffrey Barrett, JB Manchak, P. Kyle Stanford

M.A. Philosophy (LPS), *University of California, Irvine*, Spring 2018

B.S. Physics and Philosophy, *cum laude*, *Tufts University*, February 2015

Awarded High Thesis Honors for "Speculating About the Universe", directed by George E. Smith

Monograph

"Quantum gravity in a laboratory?" (with co-authors Nick Huggett and Niels Linnemann) in series, *Cambridge Elements in Foundations of Contemporary Physics*. J. Wells and R. Dawid series eds., Cambridge University Press: UK (contracted, under review)

Articles (ordered by initial date of acceptance, most recent first)

1. "A (strictly) contemporary perspective on trans-Planckian censorship", *Foundations of Physics* (forthcoming)
2. "Trans-Planckian Philosophy of Cosmology", *Studies in History and Philosophy of Science* (2021)

3. "Priority and privilege in scientific discovery" (with co-author Hannah Rubin), *Studies in History and Philosophy of Science* (2021)
4. "Better appreciating the scale of it (Lemaître and de Sitter at the BAAS Centenary)" (with co-author Siska De Baerdemaeker), *HOPOS: The Journal of the International Society for the History of Philosophy of Science* (2022)
5. "Creativity in the social epistemology of science", *Philosophy of Science* (2021)
6. "Betting on future physics", *British Journal for the Philosophy of Science* (2022)
7. "Promoting Diverse Collaborations" (with co-authors Hannah Rubin and Cailin O'Connor; first author), in *The Dynamics of Science: Computational Frontiers in History and Philosophy of Science*, edited by Grant Ramsey and Andreas De Block, Pittsburgh: University of Pittsburgh Press (in press)
8. "What's the problem with the cosmological constant?", *Philosophy of Science* (2020)
9. "Would two dimensions be world enough for spacetime?" (with co-authors Samuel C. Fletcher, J.B. Manchak, and James Owen Weatherall), *Studies in History and Philosophy of Modern Physics* (2018)

Invited Presentations

- * "Strangely enough, no one takes seriously the possible non-orientability of time". Department of Philosophy at University of Missouri. May 2022.
- * "Strangely enough, no one takes seriously the possible non-orientability of time". Beyond Spacetime public philosophy series (recorded), delivered live to University of Illinois at Chicago Student Works-in-Progress series. April 2022.
- * DEBATE PANELIST, "Philosophy of Lambda". Lichtenberg Group for History and Philosophy of Physics. June 2021.
- * "Empty space and the (positive) cosmological constant". Center for Philosophy of Science Lunchtime Colloquium Series. April 2021.
- * "Trans-Planckian Philosophy of Cosmology". Beyond Spacetime series, University of Geneva and the University of Illinois at Chicago, November 2020.
- * "Stabs in the dark sector". Center for Philosophy of Science Lunchtime Colloquium Series. October 2020.
- * "Stabs in the dark sector". Southern California Philosophy of Physics Reading Group. January 2020.
- * "Betting against vacuum energy". HPS Work-in-progress Colloquium at University of Notre Dame. February 2019.
- * "Priority and privilege in scientific discovery". Department of Philosophy at University of Michigan. November 2018 (with Hannah Rubin).
- * "Priority and privilege in scientific discovery". Formal Social Epistemology Workshop. May 2018.
- * "The non-epistemic origins of research strongholds". Department of Theoretical Philosophy at University of Groningen. October 2017.
- * "The cosmological constant problem is not meant to be solved". Southern California Philosophy of Physics Reading Group. December 2016.

Contributed Presentations (u = upcoming)

- u "The largest quantum gravity phenomenon". Philosophy of Science Association (PSA) Biennial Conference. November 2022.

- * “Cosmology and Cosmogony When The 'Expanding Universe' Was New: Debates at The BAAS”. International Society for the History of Philosophy of Science (HOPOS) Biennial Conference. June 2022.
- * “A Role for the Fauxrizon in the Semiclassical Limit of a Fuzzball”. Philosophy of Physics Group, German Physical Society Annual Conference. March 2022.
- * “Creativity in the social epistemology of science”. Philosophy of Science Association (PSA) Biennial Conference. November 2021 (postponed from 2020).
- * “Stabs in the dark sector”. Conference on the Foundations of Cosmology and Quantum Gravity, at NYU Abu Dhabi. January 2020.
- * “What’s the problem with the cosmological constant?”. Philosophy of Science Association (PSA) Biennial Conference. November 2018.
- * “Interpretation and crisis in the vacuum”. Foundations of Physics. July 2018.
- * “Interpretation and crisis in the vacuum”. British Society for the Philosophy of Science (BSPS) Annual Conference. July 2018.
- * “Priority and privilege in scientific discovery”. Computational Modeling in Philosophy. June 2018 (with Hannah Rubin).
- * “What’s the problem with the cosmological constant?”. University of Western Ontario Philosophy of Logic, Mathematics, and Physics Graduate Conference. June 2017.
- * “The non-epistemic origins of research strongholds”. Penn-Rutgers-Princeton Social Epistemology Workshop. April 2017.

Teaching Experience

Primary Instructor

- * Philosophical Issues in Physics: Spacetime, Matter, and the History of the Universe (cross-listed course intended for upper level majors in the departments of Philosophy and Physics at University of Notre Dame), Spring semester 2019
- * Robots, Space, and Civilizations of the Future (co-taught with Brendan Fleig-Goldstein, “Freshman Explorations” course in the Experimental College at Tufts University), Fall semester 2013

Teaching Assistant

- * The Good Life (department of Logic and Philosophy of Science at University of California, Irvine), Spring quarter 2016, Spring quarter 2017
- * Symbolic Logic (department of Logic and Philosophy of Science at University of California, Irvine), Winter quarter 2016
- * Space Exploration and Astrobiology (Harvard Summer School), Summer 2015
- * Cosmology for the Curious (department of Physics and Astronomy at Tufts University), Spring semester 2015
- * Primitive Navigation (Program in General Education, Science of the Physical Universe at Harvard University), Spring semester 2015
- * Advanced Topics in Physics: Special Relativity (Johns Hopkins Center for Talented Youth Summer Program), First session 2013

Guest Lecturing

- * “Creativity in Science” in Contemporary Philosophy of Science (course intended for upper-level undergraduate students in philosophy at University of California, Los Angeles), November 2021

- * “Creativity, Inconceivability, and the Possible Non-Orientability of Time” in Philosophy of Physics (course intended for non-specialist PhD students at University of Illinois at Chicago), November 2021
- * “Paperfolding, Proof Purity, and Euclidean Geometric Content” (with Will Stafford) in Philosophy, Science, and Mathematics (course intended as upper-level core seminar for student majors at University of Notre Dame), October 2021
- * “Empty Space and the Cosmological Constant” in Special Relativity (course intended for high school students in Columbia University’s College Edge program), August 2020, August 2021
- * “Priority and Privilege in Scientific Discovery, authors’ interview and discussion” in Modeling Social Believers (course intended for undergraduates as part of the core curriculum at Gonzaga University), October 2020
- * “Networks” in Evolutionary Game Theory (course intended for PhD students in the department of Philosophy at University of Notre Dame), February 2019

Other Teaching

- * Philosophy Teacher in TH!NK (outreach program through University of California, Irvine to introduce 5th grade students to philosophical inquiry), Fall 2016, Spring 2017, Spring 2018
- * TOPS fellow (student teacher program focused on curricula development for middle-school and high-school level courses on energy and thermal physics, sponsored by the Center for Ultracold Atoms at Massachusetts Institute of Technology), Summer 2014
- * Early Childhood Interpretation Intern at the Discovery Center in the Boston Museum of Science (for museum-goers ages 2-8 and their guardians), January – May 2014
- * Teaching Assistant for High School Summer Physics (remedial – pre-AP level) at King Summer Institute in Stamford, Connecticut, Summer 2011

Service to the Profession

- * Discussion group organizer for “Early Universe Cosmology” at the 2022 International Summer Institute in Philosophy of Physics on the Philosophy of Cosmology and the Philosophy of Quantum Gravity (June 2022)
- * Reading group organizer (with Juliusz Doboszewski), “Primordial Black Holes as Dark Matter Candidates” (International meetings conducted via Zoom, with mixed audience philosophers of physics and physicists, March-May 2022)
- * Cushing Memorial Prize committee administrator (2018-2022)
- * Symposium organizer for “Empirical Quantum Gravity?” at the Philosophy of Science Association (PSA) Biennial Conference (November 2022)
- * Discussion moderator at the Philosophy of Dark Energy Workshop (March 2019)
- * Organizational support for Methodology and Epistemology in Cosmology Conference (February 2017)
- * Referee for Oxford University Press - *Philosophy*, as well as for *Philosophy of Science*, *British Journal for the Philosophy of Science*, *Synthese*, *Foundations of Physics*, and *Studies in History and Philosophy of Modern Physics*, and for the Irvine-Munich-PoliMi-Salzburg Conference in Philosophy and Foundations of Physics (2018) and the Irvine-Princeton-Pittsburgh Conference on the Mathematical and Conceptual Foundations of Physics (2016)

Service to the Department

- * Graduate student reading group organizer, “Foundations of General Relativity” (*University of Notre Dame*, Fall 2018)

- * Graduate student reading group organizer, “Locally Covariant Quantum Field Theory” (*University of California, Irvine*, Spring 2018)
- * Graduate student reading group organizer, “Quantum Field Theory on Curved Spacetime” (*University of California, Irvine*, Winter 2018)
- * Philosophy of physics research group/reading group organizer (*University of California, Irvine*, 2017-2018 academic year)

Awards and Grants

- * Robert K. Clifton Memorial Book Prize, for “What’s the problem with the cosmological constant?” *University of Western Ontario*. (2017)
- * Newkirk Center for Science and Society 2017-2018 Graduate Fellow, for “Impacts of homophily on the dispersion of new scientific developments from sub-populations to the community at large”. Amount awarded: \$10,000 (2017)