

Benjamin Eva – Curriculum Vitae

Department of Philosophy
Duke University
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Academic Appointments

2024-present Associate Professor, Duke University

2020-2024 Assistant Professor, Duke University

2019 - 2020 Zukunftskolleg Research Fellow, University of Konstanz

2017 - 2020 Alexander von Humboldt Postdoctoral Research Fellow, University of Konstanz

Continuing External Member of the Munich Center for Mathematical Philosophy

2016-2017 Postdoctoral Research Fellow, Munich Center for Mathematical Philosophy/LMU Center for Advanced Studies

Education

10/2015 PhD in Philosophy, University of Bristol

07/2011 MA in Philosophy, University of Bristol

07/2010 BA in Philosophy, University of Exeter

Publications

PEER REVIEWED JOURNAL ARTICLES

(31) Forthcoming. ‘The Case for Incomparability’, *Ergo*.

(30) 2024. ‘Spanning and Spacing: Commentary on ‘New Possibilities for Fair Algorithms’, *Philosophy and Technology*, 37: 135.

(29) 2024. ‘An Impossibility Theorem for Base Rate Tracking and Equalised Odds’ (with Rush Stewart, Reuben Stern and Shanna Slank), *Analysis*. <https://doi.org/10.1093/analys/anae039>.

(28) 2024. ‘Individual Fairness, Base Rate Tracking and the Lipschitz Condition’, *Journal of Artificial Intelligence Research*, 80: 859-873.

(27) 2024. ‘Comparative Learning’, *Philosophy of Science*, 91(1): 1 – 17.

(26) 2023. 'Anti-Reductionist Interventionism' (with Reuben Stern), *British Journal for the Philosophy of Science*, 74(1).

(25) 2023. 'How a Minimal Learning Agent can Infer the Existence of Unobserved Variables in a Complex Environment' (with Katja Ried, Thomas Müller and Hans Briegel), *Minds and Machines*, 33: 185–219.

(24) 2022. 'Comparative Opinion Loss' (with Reuben Stern), *Philosophy and Phenomenological Research*, 107(3): 613–637.

(23) 2022. 'Algorithmic Fairness and Base Rate Tracking', *Philosophy and Public Affairs*, 50(22): 239–266.

(22) 2022. 'Chancy Covariance and the Mind Body Problem', *Oxford Studies in Philosophy of Mind*, Volume 2, Uriah Kriegel (ed), Oxford University Press: 177–216.

(21) 2022. 'Four Approaches to Supposition' (with Branden Fitelson and Ted Shear), *Ergo*, 8(26).

(20) 2021. 'The Logic of Partial Supposition' (with Stephan Hartmann), *Analysis*, 81(2): 215–224.

(19) 2020. 'A Bridge Between Q-Worlds' (with Andreas Döring and Masanao Ozawa), *Review of Symbolic Logic*, 14(2): 447–486.

(18) 2020. 'The Logic of Conditional Belief', *Philosophical Quarterly*, 79(281): 759–779.

(17) 2020. 'Learning from Conditionals' (with Stephan Hartmann and Soroush Rafiee Rad), *Mind*, 129(154): 461–508.

(16) 2019. 'On the Origins of Old Evidence' (with Stephan Hartmann), *Australasian Journal of Philosophy*, 98: 481–494.

(15) 2019. 'Principles of Indifference', *The Journal of Philosophy*, 116(7): 390–411.

(14) 2019. 'A New Probabilistic Explanation of the Modus Ponens–Modus Tollens Asymmetry' (with Henrik Singmann and Stephan Hartmann), *Proceedings of the 41st Annual Meeting of the Cognitive Science Society*.

(13) 2019. 'The Similarity of Causal Structure' (with Stephan Hartmann and Reuben Stern), *Philosophy of Science*, 86(5): 821–835.

(12) 2019. 'Causal Explanatory Power' (with Reuben Stern), *British Journal for the Philosophy of Science*, 70(4): 1029–1050..

(11) 2018. 'Bayesian Argumentation and the Value of Logical Validity' (with Stephan Hartmann), *Psychological Review*, 125(5).

(10) 2018. 'Emerging (In)Determinacy', *Thought: a Journal of Philosophy*, 7(1): 31–39.

(9) 2018. 'When No Reason For is a Reason Against' (with Stephan Hartmann), *Analysis*, 78(3): 426–431.

(8) 2017. 'A-Symmetric Confirmation and Anthropic Skepticism', *Synthese*, <https://doi.org/10.1007/s11229-017-1486-9>.

(7) 2017. 'Topos Theoretic Quantum Realism', *British Journal for the Philosophy of Science*, 68(4): 1149–1181.

(6) 2016. 'Category Theory and Physical Structuralism', *European Journal for the Philosophy of Science*, 6(2): 231–246.

(5) 2016. 'Modality and Contextuality in Topos Quantum Theory', *Studia Logica*, 104(6): 1099–1118.

(4) 2015. 'Towards a Paraconsistent Quantum Set Theory', *Electronic Proceedings in Theoretical Computer Science (Proceedings of the 12th International Workshop for Quantum Physics and Logic, University of Oxford)*, 195: 158–169.

EDITED VOLUMES

(3) 2020. 'Reasoning in Physics', forthcoming Special issue of *Synthese* (co-edited with Stephan Hartmann).

INVITED CONTRIBUTIONS

(2) 2017. Review of Jeffrey Bub's 'Bananaworld: Quantum Mechanics for Primates', *Metascience*, 26(2): 251–255.

(1) 2016. 'Paraconsistency and Quantum Theory', In Aerts, De Ronde, Freytes and Giuntini (eds): *Probing the Meaning and Structure of Quantum Mechanics: Superpositions, Semantics, Dynamics and Identity*, World Scientific.

Research Funding

2024-2025 Duke interdisciplinary research seed grant for the 'Duke Causation Group' (\$14,000). (with Reuben Stern)

2019-2024 Zukunftskolleg Research Fellowship at the University of Konstanz (~ €400,000): ended early to take up position at Duke.

2018-2021 Member of DFG funded international research network ‘Category Theory in Philosophy of Science’.

2017-2020 Alexander von Humboldt Research Fellowship (\sim €150,000).

2011-2014 Full AHRC Doctoral Scholarship (\sim £45,000 plus fees).

Awards

2025 [Langford Lecturer Award](#)

Talks, Commentaries and Lectures

65 in total (35 invited, 30 refereed, 14 presented by co-authors)

2025 PPE Society Meeting (New Orleans), Causation Workshop (Köln), Vanderbilt Epistemology Workshop

2024 Moral AI Book Symposium (Duke), The AI Project invited talk (UNC Chapel Hill)

2023 UNC Chapel Hill Work in Progress Seminar, Applied Epistemology Workshop (UNC Chapel Hill), Orange Beach Epistemology Workshop, Society for Psychology and Philosophy (Louisville)

2022 PPE Society Meeting (New Orleans)

2021 Northeastern Epistemology Workshop, Orange Beach Epistemology Workshop, Society for Psychology and Philosophy (Princeton)

2020 Departmental Seminar (Columbia), Departmental Seminar (Duke), Departmental Seminar (UT San Antonio), Departmental Seminar (LMU Munich), Causation and Reduction from Metaphysics to the Sciences (University of Illinois at Urbana-Champaign).

2019 Pacific Rim Conference on Artificial Intelligence (Fiji), Australasian Association of Philosophy Conference (Woolongong), Formal Epistemology Workshop (Turin), Foundations of Probability Seminar (Rutgers), Philosophy Colloquium (MIT), AI CON 2019 (Bosch Center for Artificial Intelligence), German Physical Society 2019 Workshop on Quantum Science and Information Technologies (Freiburg), Foundations of Categorical Philosophy of Science Workshop (LMU Munich)

2018 Colloquium (University of Illinois at Urbana-Champaign), Philosophy of Science Association Biennial Meeting (Seattle), Decision Theory and the Future of Artificial Intelligence (LMU Munich), Explanatory Power workshop (Geneva), 11th MuST Conference in Philosophy of Science (Turin), Foundations of Quantum Mechanics Workshop (LMU Munich), Recent Work in the Philosophy of Probability and Conditionals Workshop (LMU Munich),

Explanation and Reduction in the Sciences Workshop (Hebrew University)

2017 Foundations of Quantum Mechanics Workshop (Nagoya), Departmental Seminar (Düsseldorf), Causal and Explanatory Reasoning Workshop (Venice), European Society for the Philosophy of Science Biannual Conference (Exeter), European Congress for Analytic Philosophy (LMU Munich), Causation, Explanation, Conditionals Workshop (LMU Munich), Recent Work in Formal Epistemology Workshop (LMU Munich), Reasoning Club 2017 (Turin), Reasoning and Argumentation in Science (LMU center for Advanced Studies), British Society for the Philosophy of Science Biannual Conference (Edinburgh), Poznan Reasoning Week (Poznan), Formal Representations of Ignorance Workshop (Pittsburgh)

2016 Homotopy Type Theory in Logic, Metaphysics and the Philosophy of Physics Conference (Bristol), Reasoning in Physics Workshop (LMU Munich), Learning Conditionals Workshop (LMU Munich)

2015 12th International Workshop on Quantum Physics and Logic (Oxford), 2nd International Workshop on Quantum Mechanics and Quantum Information (Brussels), Workshop on Foundations of Quantum Mechanics (Nagoya), Annual Conference of the British Society for the Philosophy of Science (Cambridge), 12th biennial conference of the International Quantum Structures Association (Olomuc)

Teaching

As PRIMARY INSTRUCTOR

2021-present Independent Study Unit (x6), Duke University.

2024-present Graduate Seminar 'Formal Methods for Philosophy' (x2), Duke University.

2025-present Graduate Seminar 'Professional Development' (x2), Duke University.

2024 Undergraduate Lecture 'Introduction to Philosophy', Duke University.

2023 Graduate Seminar 'Philosophy of Artificial Intelligence' (with Walter Sinnott-Armstrong), Duke University.

2023 Undergraduate Seminar 'Philosophy through Science Fiction' (with Ben Sarbey), Duke University.

2022 Undergraduate Seminar 'Paradoxes of Rational Choice', Duke University.

2022 Graduate Seminar 'Kripke's Naming and Necessity', Duke University.

2021-Present Graduate Seminar ‘Symbolic Logic’ (x3), Duke University.

2021 Mixed graduate/undergraduate Seminar ‘Advanced Epistemology’ (with Jennifer Jhun), Duke University.

2021-2022 Undergraduate Seminar ‘Knowledge and Certainty’ (x2), Duke University.

2020 Graduate Proseminar ‘Metaphysics and Epistemology’ (with Jennifer Jhun), Duke University.

2020 Graduate/Advanced Undergraduate seminar ‘Bayesian Epistemology’, Duke University.

2019 Undergraduate seminar ‘Kripke’s Naming and Necessity’, University of Konstanz.

2019 Undergraduate seminar ‘Philosophy of Cognitive Science’, University of Konstanz.

2018 Advanced undergraduate/graduate seminar ‘Causation, Responsibility and Blame’, University of Konstanz.

2017 Graduate seminar ‘Reasoning and Argumentation’, Munich Center for Mathematical Philosophy.

As SEMINAR TUTOR

2014 Second year undergraduate course ‘Realism and Normativity’, University of Bristol, Department of Philosophy.

2013 First year undergraduate course ‘Introduction to Formal Logic’, University of Bristol, Department of Philosophy.

2012 First year undergraduate course ‘Introduction to Philosophy B’ (Moral and Political Philosophy), University of Bristol, Department of Philosophy.

STUDENT SUPERVISION

2024-present Dissertation supervisor for Victor Crespo (Philosophy).

2024-present Dissertation supervisor for Yuan Dong (Philosophy).

2025-present On Dissertation Committee for Michael Bergdolt (Philosophy).

2025-present On Dissertation Committee for Mary Purcell (Philosophy).

2024-present On Dissertation Committee for Dylan Brown (Philosophy).

2023-present On Dissertation Committee for Nina van Rooy (Philosophy).

2023-2024 On Dissertation Committee for Kevin O’Neil (Cognitive Science).

2021-2022 Supervisor for undergraduate Mellon Mays research project.

Academic Service

JOURNAL REFEREEING

(“*” = multiple occasions)

*Analysis**, *Annalen der Physik**, *Australasian Journal of Philosophy**, *British Journal for the Philosophy of Science**, *Cognition**, *Economics Letters*, *Erkenntnis**, *Ergo**, *European Journal for the Philosophy of Science**, *Foundations of Science**, *Frontiers Research Metrics and Analysis*, *International Journal of Theoretical Physics*, *Journal for the General Philosophy of Science*, *Journal of Philosophy**, *Journal of Philosophical Logic**, *Memory and Cognition**, *Mind**, *Minds and Machines**, *Nous**, *Philosopher’s Imprint**, *Philosophical Quarterly**, *Philosophical Review**, *Philosophical Studies**, *Philosophy and Phenomenological Research**, *Philosophy and Technology**, *Philosophy of Science**, *Psychological Review**, *Review of Symbolic Logic**, *Studies in the History and Philosophy of Modern Physics**, *Studies in the History and Philosophy of Science**, *Synthese**, *Theoria*.

GRANT REFEREEING

Research grant reviewing for the German Research Council (DFG), 2021.

PROGRAM COMMITTEES

- (i) ACM Conference on Fairness, Accountability, and Transparency (x2) 2025, 2026.
- (ii) Formal Epistemology Workshop, 2024
- (iii) North American Summer School in Logic, Language and Information 2020,
- (iv) International Conference for Philosophy of Science and Formal Methods in Philosophy 2019

CONFERENCE AND EVENT ORGANISATION

2023, 2024, 2026. Founder and organiser of [Duke-UNC Epistemology workshop](#) (x3).

2022-present. Founder and organiser (with Reuben Stern) of the [Duke Causation Group](#).

Organiser (with Stephan Hartmann and Karolina Krzyzanowska) of ‘Reasoning and Argumentation in Science’ Conference at the LMU Center for Advanced Studies, May 2017.

Organiser (with Stephan Hartmann) of ‘Reasoning in Physics’ workshop at the LMU Center for Advanced Studies, December 2016.

UNIVERSITY SERVICE

Director of Graduate Studies, 2025-Present.

Arts and Sciences Budget Advisory Committee. 2025-Present.

Trinity Committee on Instructional Support. 2026.

Philosophy department placement director, 2022-2023.

Served on selection committee for philosophy graduate admissions (x4) at Duke University, 2022–2026.

Organised philosophy department work in progress talk series, 2021–2022, 2026.

Selection committee for philosophy faculty positions at Duke University, 2021–2022.

Selection committee for postdoctoral research fellowships at the Munich Center for Mathematical Philosophy, 2017.

Career Breaks

Paternity Leave: 09/2014-12/2014, 03/2019–06/2019 and 06/2023–10/2023.