

Christopher Pincock
Curriculum Vitae

Department of Philosophy
The Ohio State University
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Education

Ph.D. University of California, Berkeley, Philosophy, 2002
B.A. (Honors) University of Western Ontario, Philosophy, 1996

Academic Employment

2015 – present Professor, Philosophy, The Ohio State University
2012 – 2015 Associate Professor, Philosophy, The Ohio State University
2011 – 2012 Associate Professor, Philosophy, University of Missouri
2007 – 2010 Associate Professor, Philosophy, Purdue University
2002 – 2007 Assistant Professor, Philosophy, Purdue University

Areas of Specialization

Philosophy of Science; Philosophy of Mathematics; History of Analytic Philosophy

Areas of Competence

Logic and Philosophy of Logic; Probability; History of Early Modern Philosophy

Publications

Books

(2) *Mathematics and Explanation*, Cambridge Elements in the Philosophy of Mathematics, Cambridge University Press, 2023. 80 pages.
(1) *Mathematics and Scientific Representation*, Oxford University Press, 2012. xiv, 330 pages. (Paperback, 2014.) (Some reviews, discussions, & critical notices: J. Saatsi, *NDPR* 2012.10.06, M. Balaguer, E. Landry & S. Bangu, *Metascience* 22 (2013): 247-273, S. Baron, *Mind* 122 (2013): 1167-1171, A. Kennedy, *Int. Stud. Phil. Sci.* 27 (2013): 95-98, M. Liston, *Phil. Math.* 21 (2013): 371-385, S. Walsh, E. Knox & A. Caulton, *Phil. Sci.* 81 (2014): 460-469, A. Baker, *Brit. J. Phil. Sci.* 66 (2015): 695-699.)

Edited Volumes

(3) Co-editor with S. Lapointe, *Innovations in the History of Analytical Philosophy*, Palgrave Macmillan, 2017. xix, 365 pages.
(2) Co-editor with M. Curd and J. Cover, *Philosophy of Science: The Central Issues*, Second edition, Norton, 2012. xx, 1393 pages.
(1) Co-editor with M. Vorms, *Models and Simulations 4, Synthese* 190 (2013): 187-337.

Refereed Articles

- (22) “A Defense of Truth as a Necessary Condition on Explanation”, *Erkenntnis* 88 (2023): 621-640.
- (21) “Concrete Scale Models, Essential Idealization and Causal Explanation”, *British Journal for the Philosophy of Science* 73 (2022): 299-323.
- (20) “The Derivation of Poiseuille’s Law: Heuristic and Explanatory Considerations”, *Synthese* 199 (2021): 11667-11687.
- (19) “Reichenbach, Russell, and Scientific Realism”, *Synthese* 199 (2021): 8485-8506.
- (18) “Explanatory Relevance and Contrastive Explanation”, *Philosophy of Science* (Symposium Proceedings) 85 (2018): 806-818.
- (17) “Abstract Explanations in Science”, *British Journal for the Philosophy of Science* 66 (2015): 857-882.
- (16) “The Unsolvability of the Quintic: A Case Study in Abstract Mathematical Explanation”, *Philosophers’ Imprint* 15 (2015): 1-19. (<http://www.philosophersimprint.org/015003/>)
- (15) “How to Avoid Inconsistent Idealizations”, *Synthese* 191 (2014): 2957-2972.
- (14) “Mathematical Models of Biological Patterns: Lessons from Hamilton’s Selfish Herd”, *Biology and Philosophy* 27 (2012): 481-496.
- (13) “Mathematical Explanations of the Rainbow”, *Studies in History and Philosophy of Modern Physics* 42 (2011): 13-22.
- (12) “Modeling Reality”, *Synthese* 180 (2011): 19-32.
- (11) “Mathematics, Science and Confirmation Theory”, *Philosophy of Science* (Symposium Proceedings) 77 (2010): 959-970.
- (10) “From Sunspots to the Southern Oscillation: Confirming Models of Large-Scale Phenomena in Meteorology”, *Studies in the History and Philosophy of Science* 40 (2009): 45-56.
- (9) “Russell’s Last (and Best) Multiple-Relation Theory of Judgment”, *Mind* 117 (2008): 107-139.
- (8) “Mathematical Idealization”, *Philosophy of Science* (Proceedings) 74 (2007): 957-967.
- (7) “A Role for Mathematics in the Physical Sciences”, *Nous* 41 (2007): 253-275.
- (6) “Richard Semon and Russell’s *Analysis of Mind*”, *Russell* 26 (2006): 101-125.
- (5) “Overextending Partial Structures: Idealization and Abstraction”, *Philosophy of Science* (Proceedings) 72 (2005): 1248-1259.
- (4) “A Reserved Reading of Carnap’s *Aufbau*”, *Pacific Philosophical Quarterly* 86 (2005): 518-543.
- (3) “A New Perspective on the Problem of Applying Mathematics”, *Philosophia Mathematica* 12 (2004): 135-161.
- (2) “A Revealing Flaw in Colyvan’s Indispensability Argument”, *Philosophy of Science* 71 (2004): 61-79.
- (1) “Russell’s Influence on Carnap’s *Aufbau*”, *Synthese* 131 (2002): 1-37.

Invited Articles

- (21) (with P. Mancosu and F. Poggiolesi) “Mathematical Explanation”, *Stanford Encyclopedia of Philosophy* (Fall 2023), <https://plato.stanford.edu/entries/mathematics-explanation/>.
- (20) “Interpreting Carnap’s Construction of the World”, in A. Tuboly & A. Richardson, *Interpreting Carnap*, Cambridge University Press, forthcoming.
- (19) “Russell and Logical Empiricism”, in K. Klement (ed.), *Oxford Handbook to Bertrand Russell*, forthcoming.

- (18) “Understanding the Success of Science” and “Reply to Potochnik”, in K. Khalifa, I. Lawler & E. Sheeh (eds.), *Scientific Understanding and Representation: Modeling in the Physical Sciences*, Routledge, 2023, 135-150, 167-171.
- (17) “Logical Empiricism in the Anglophone World: Early Receptions”, in T. Uebel & C. Limbeck-Lilenau (eds.), *Handbook of Logical Empiricism*, Routledge, 2022, 325-333.
- (16) “Mathematical Explanation Requires Mathematical Truth”, in S. Dasgupta and B. Weslake (eds.), *Current Controversies in Philosophy of Science*, Routledge, 2020, 39-50.
- (15) “Neutral Monism”, in R. Wahl (ed.), *Bloomsbury Companion to Russell*, Bloomsbury Press, 2019, 312-333.
- (14) “Accommodating Explanatory Pluralism”, in A. Reutlinger and J. Saatsi (eds.), *Explanation Beyond Causation*, Oxford University Press, 2018, 39-56.
- (13) “Introduction”, with S. Lapointe, in S. Lapointe & C. Pincock (eds.), *Innovations in the History of Analytical Philosophy*, Palgrave Macmillan, 2017, 1-23.
- (12) “Ernest Nagel’s Naturalism: A Microhistory of the American Reception of Logical Empiricism”, in A. Preston (ed.), *Analytic Philosophy: An Interpretive History*, Routledge, 2017, 160-174.
- (11) “Logical Empiricism”, in J. Hawthorne, H. Cappelen and T. Szabo Gendler (eds.), *Oxford Handbook of Philosophical Methodology*, Oxford University Press, 2016, 93-111.
- (10) “Philosophy of Mathematics”, J. Saatsi & S. French (eds.), *Companion to the Philosophy of Science*, Continuum, 2011, 314-333.
- (9) “The Applicability of Mathematics”, *Internet Encyclopedia of Philosophy*, <http://www.iep.utm.edu/math-app/>.
- (8) “Carnap’s *Logical Structure of the World*”, *Philosophy Compass* 4/6 (2009): 951-961.
- (7) “Towards a Philosophy of Applied Mathematics”, in O. Bueno & Ø. Linnebo (eds.), *New Waves in Philosophy of Mathematics*, Palgrave Macmillan, 2009, 173-194.
- (6) “Mathematical Structural Realism”, in A. Bokulich & P. Bokulich (eds.), *Scientific Structuralism*, Boston Studies in the Philosophy of Science, volume 281, Springer, 2011, 67-79.
- (5) “Carnap, Russell and the External World”, in M. Friedman & R. Creath (eds.), *Cambridge Companion to Carnap*, Cambridge University Press, 2008, 106-128.
- (4) “The Limits of the Relative A Priori”, *Soochow Journal of Philosophical Studies* (Taiwan) 16 (2007): 51-68.
- (3) “Accounting for the Unity of Experience in Dilthey, Rickert, Bradley and Ward”, in U. Feest (ed.), *Historical Perspectives on Erklären and Verstehen*, Archimedes, Vol. 21, Springer, 2010, 187-206. (Also available in Max Planck Institute for the History of Science, Preprint Series, Vol. 324, 2007, 175-192.)
- (2) “Conditions on the Use of the One-dimensional Heat Equation”, in G. Sica (ed.), *Essays on the Foundations of Mathematics and Logic*, Vol. 2, Polimetrika, 2005, 67-79.
- (1) “Carnap and the Unity of Science: 1921-1928”, in T. Bonk (ed.), *Language, Truth and Knowledge: Contributions to the Philosophy of Rudolf Carnap*, Vienna Circle Institute Library, Volume 2, Kluwer, 2003, 87-96.

Critical Notices and Discussion Notes

- (11) Book Forum: “C. Rice’s *Leveraging Distortions: Explanation, Idealization, and Universality in Science*”, *Studies in the History and Philosophy of Science* 95 (2022): 230-232.
- (10) Book Symposium: “S. French’s *There are No Such Things as Theories*”, *Metascience* 30 (2021): 3-8.

- (9) Book Symposium: “A. Casullo’s *Essays on A Priori Knowledge and Justification*”, *Philosophical Studies* 173 (2016): 1687-1694.
- (8) Critical Notice: “S. Bangu, *The Applicability of Mathematics in Science: Indispensability and Ontology*”, *Philosophia Mathematica* 22 (2014): 401-412.
- (7) Book Symposium: “H. J. Glock’s *What is Analytic Philosophy?*”, *Journal for the History of Analytical Philosophy* 2/2 (2013): 6-10.
- (6) Book Symposium: “Reply to Balaguer, Landry and Bangu”, *Metascience* 22 (2013): 266-273.
- (5) (with P. Mancosu) “Mathematical Explanation”, *Oxford Bibliographies in Philosophy*, D. Pritchard (ed.), 2012. doi: 10.1093/OBO/9780195396577-0029.
- (4) Book Symposium: “M. Leng’s *Mathematics and Reality*”, *Metascience* 21 (2012): 269-275.
- (3) “On Batterman’s ‘On the Explanatory Role of Mathematics in Empirical Science’”, *British Journal for the Philosophy of Science* 62 (2011): 211-217.
- (2) Critical Notice: “Mark Wilson, *Wandering Significance: An Essay on Conceptual Behavior*”, *Philosophia Mathematica* 18 (2010): 106-121.
- (1) Critical Notice: “T. Wilholt, *Zahl und Wirklichkeit [Number and Reality]*”, *Philosophia Mathematica* 13 (2005): 329-337.

Book Reviews

- (23) “Carus, et al. (eds.), *Collected Works of R. Carnap, Vol. 1: The Early Writings*”, *Mind* 131 (2022): 317-326.
- (22) “B. Skow, *Reasons Why*”, *Notre Dame Philosophical Reviews*, 2017.05.14.
- (21) “I. Hacking, *Why is There Philosophy of Mathematics At All?*”, *British Journal for the Philosophy of Science* 67 (2016): 907-912.
- (20) “W. Demopoulos, *Logicism and its Philosophical Legacy*”, *Russell* 35 (2015): 82-87.
- (19) “J. R. Brown, *Platonism, Naturalism, and Mathematical Knowledge*”, *Mind* 123 (2014): 1174-1177.
- (18) “B. Linsky, *The Evolution of Principia Mathematica: Bertrand Russell’s Manuscripts and Notes for the Second Edition*”, *Bulletin of Symbolic Logic* 19 (2013): 106-108.
- (17) “B. van Fraassen, *Scientific Representation: Paradoxes of Perspective*”, *British Journal for the Philosophy of Science* 62 (2011): 677-682.
- (16) “M. Suárez (ed.), *Fictions in Science: Philosophical Essays on Modeling and Idealization*”, *International Studies in the Philosophy of Science* 25 (2011): 196-199.
- (15) “B. Gold & R. A. Simons (ed.), *Proof and Other Dilemmas: Mathematics and Philosophy*”, *Association for Computing Machinery SIGACT News* 41 (2010): 28-33.
- (14) “D. Reed, *The Origins of Analytic Philosophy: Kant and Frege*”, *History and Philosophy of Logic* 30 (2009): 308-309.
- (13) “J. Lützen, *Mechanistic Images in Geometric Form: Heinrich Hertz’s Principles of Mechanics*”, *Philosophia Mathematica* 16 (2008): 140-144.
- (12) “Preston on the Illusory Character of Analytic Philosophy”, *Bertrand Russell Society Quarterly* 136 (2007): 40-47.
- (11) “S. Miah, *Russell’s Theory of Perception (1905-1919)*”, *Notre Dame Philosophical Reviews*, 2007.03.08.
- (10) “Rejoinder to Soames”, *Russell* 26 (2006): 77-86.
- (9) “M. Frápolli (ed.), *F. P. Ramsey: Critical Reassessments*”, *History and Philosophy of Logic* 27 (2006): 81-82.

- (8) “S. Soames, *Philosophical Analysis in the Twentieth Century* (2 vols.)”, *Russell* 25 (2006): 167-171.
- (7) “D. Corfield, *Towards a Philosophy of Real Mathematics*”, *Philosophy of Science* 72 (2005): 632-634.
- (6) “Awodey and Klein (eds.), *Carnap Brought Home: The View from Jena*”, in M. C. Galavotti (ed.), *Cambridge and Vienna. Frank P. Ramsey and the Vienna Circle*, *Vienna Circle Institute Yearbook 12*, Kluwer, 2006, pp. 213-218.
- (5) “N. Milkov, *A Hundred Years of English Philosophy*”, *Notre Dame Philosophical Reviews*, 2004.10.06.
- (4) “Wittgenstein and Waismann, *The Voices of Wittgenstein: The Vienna Circle*, G. Baker (ed.)”, *History and Philosophy of Logic* 25 (2004): 156-157.
- (3) “Parrini, Salmon and Salmon (eds.), *Logical Empiricism: Historical and Contemporary Perspectives*”, in F. Stadler (ed.), *Induction and Deduction in the Sciences*, *Vienna Circle Institute Yearbook 11*, Kluwer, 2004, pp. 331-334.
- (2) “M. Ostrow, *Wittgenstein’s Tractatus: A Dialectical Interpretation*”, *Notre Dame Philosophical Reviews*, 2003.01.14.
- (1) “E. Reck (ed.), *From Frege to Wittgenstein: Perspectives on Early Analytic Philosophy*”, *History and Philosophy of Logic* 23 (2002): 297-300.

Work in Progress

- (4) Historicist Scientific Realism.
- (3) Defending a Realist Stance, under review.
- (2) “Minimal Models”, for T. Knuuttila, N. Carrillo & R. Koskinen (eds.), *Handbook of Philosophy of Scientific Modeling*, under review.
- (1) “The Legacy and Interpretation of the *Aufbau*”, for C. Damböck & G. Schiemer (eds.), *Handbuch Rudolf Carnap*, Metzler Verlag, under review.

Presentations

Papers

- (68) “A Historicist Defense of Scientific Realism”, Colloquium, Dept. of History and Philosophy of Science and Medicine, Indiana University, Bloomington, IN, March 2023.
- (67) “Defending a Realist Stance”, Symposium presentation, Biennial Meeting of the Philosophy of Science Association, Pittsburgh, PA, Nov. 2022.
- (66) “Integrating Representational, Exploratory, and Design Modeling”, co-authored with Michael Poznic, 11th International Congress of the Society for Analytic Philosophy (GAP), Berlin, Germany, Sept. 2022.
- (65) “Propositional Attitudes in Russell’s *Analysis of Mind*”, (i) *Analysis of Mind* Centenary: History and Future of Russellian Monism, McMaster University, Hamilton, Canada, June 2022, (ii) Society for the Study of the History of Analytic Philosophy Annual Meeting, Shanxi University, China, July 2022. (presented remotely)
- (64) “Explaining Morley’s Theorem”, Mathematical Explanation: Ideas, Models, Perspectives. IHPST Conference, Paris, France, May 2022. (presented remotely)
- (63) “Dogmatism and Selective Scientific Realism”, Invited Symposium, Central Division American Philosophical Association Meeting, Chicago, IL, Feb. 2022.
- (62) “A New Defense of Scientific Realism”, Bergen Philosophy of Science Workshop, Bergen, Norway, Nov. 2021. (presented remotely)

- (61) “What do Engineers Understand? The Case of Biological Methanation”, co-authored with Michael Poznic, European Philosophy of Science Association 8th Biennial Meeting, Turin, Italy, Sept. 2021. (presented remotely)
- (60) “Understanding the Success of Science”, Scientific Understanding and Representation 3 Workshop, Radboud University, Nijmegen, Netherlands, April 2021. (presented remotely)
- (59) “Explanations of Universality”, Workshop on Mathematical Explanations and Emergence, Université Clermont-Auvergne, Clermont-Ferrand, France, May 2019.
- (58) “Russell and Logical Empiricism”, Workshop on the History of Analytic Philosophy, Université Clermont-Auvergne, Clermont-Ferrand, France, May 2019.
- (57) “A Defense of Truth as a Necessary Condition on Explanation”, (i) Philosophy Colloquium, Oakland University, MI, March 2019, (ii) 11th Annual Auburn Philosophy Conference, Auburn, AL, April 2019, (iii) Idealization Across the Sciences, Institute of Philosophy, Prague, Czech Republic, June 2019. (iv) Mathematics and its Applications: Philosophical Issues, University of Leeds, UK, Sept. 2019.
- (56) “The Quest for Universal Biology”, Symposium presentation, Biennial Meeting of the Philosophy of Science Association, Seattle, WA, Nov. 2018.
- (55) “Concrete Scale Models and Essential Idealization”, Models and Simulations 8, Columbia, SC, March 2018.
- (54) “Mathematical Explanations of the Tides: From Newton to Laplace”, Mathematics and Mechanics in the Newtonian Age Workshop, Seville, Spain, Sept. 2017.
- (53) “Explanatory Relevance and Contrastive Explanation”, Symposium presentation, Biennial Meeting of the Philosophy of Science Association, Atlanta, GA, Nov. 2016.
- (52) “Abstract Explanations with Idealized Models”, (i) Invited Symposium, Pacific Division American Philosophical Association Meeting, San Francisco, CA, March 2016, (ii) Philosophy Colloquium, Leibniz Hannover University, Hannover, Germany, June 2016.
- (51) “Scientific Representation without Representationalism”, (i) Modelling and Representation Conference, University of the Basque Country, San Sebastian, Spain, Dec. 2015, (ii) Semantics of Theories Conference, Center for Mathematical Philosophy, Munich, Germany, June 2016.
- (50) “Explaining with Idealized Causal Models”, Philosophy Colloquium, University of Cincinnati, Oct. 2015.
- (49) “Fourier Series as an Interface between Mathematics and Physics”, Fifth Biennial Conference of the Society for Philosophy of Science in Practice, Aarhus, Denmark, June 2015.
- (48) “Inference to the Best Explanation: A Modest Proposal”, (i) Plenary Address, British Society for the Philosophy of Science Annual Conference, Fitzwilliam College, University of Cambridge, UK, July 2014, (ii) Philosophy Colloquium, Purdue University, West Lafayette, IN, Sept. 2014, (iii) Midwest Epistemology Workshop 8, University of Michigan, Ann Arbor, MI, Oct. 2014.
- (47) “Russell and Wittgenstein on Judgment and the Self”, History of Analytic Philosophy Workshop, Inter University Center, Dubrovnik, Croatia, June 2014.
- (46) “Newton, Laplace and Salmon on Explaining the Tides”, (i) Philosophy Colloquium, Simon Fraser University, Vancouver, BC, Canada, February 2014, (ii) Philosophy Colloquium, Western Michigan University, Kalamazoo, MI, March 2014, (iii) Philosophy Colloquium, Case Western Reserve University, Cleveland, OH, April 2014, (iv) Colloquium presentation, Biennial Meeting of the Philosophy of Science Association, Chicago, IL, Nov. 2014, (v) Philosophy Colloquium, Denison University, Granville, OH, Dec. 2014.

- (45) “Felix Klein as a Prototype for the Philosophy of Mathematical Practice”, (i) Second Meeting of the Association for the Philosophy of Mathematical Practice, University of Illinois, Urbana-Champaign, IL, October 2013, (ii) Fifth French Philosophy of Mathematics Workshop, Blaise Pascal University, Clermont-Ferrand, France, October 2013.
- (44) “Extrapolating with Models”, Fourth Biennial Conference of the Society for Philosophy of Science in Practice, University of Toronto, Toronto, Canada, June 2013.
- (43) “Abstract Explanations in Science and Mathematics”, (i) Philosophy Colloquium, Kenyon College, Gambier, OH, February 2013, (ii) Colloquium, Minnesota Center for the Philosophy of Science, Minneapolis, MN, March 2013.
- (42) “Principled Limitations on Inference to the Best Explanation”, (i) Philo-STEM 4, IPFW University, Fort Wayne, IN, October 2012, (ii) Indispensability and Explanation Workshop, IHPST, Paris, France, November 2012, (iii) Philosophy Colloquium, Ohio University, Athens, OH, December 2012.
- (41) “Methodological Debates within Logical Empiricism”, First Annual Conference, Society for the Study of the History of Analytical Philosophy, McMaster University, Hamilton, Canada, May 2012.
- (40) “Mathematical Explanation and Entangled Properties”, LOGOS group, University of Barcelona, Barcelona, Spain, March 2012.
- (39) “Abstract Explanation and Difference-Making”, (i) Scuola Normale Superiore, Pisa, Italy, December 2011, (ii) Munich Center for Mathematical Philosophy, Germany, December 2011, (iii) Ohio State University, Philosophy Colloquium, Columbus, OH, January 2012, (iv) University of Western Ontario, Philosophy Colloquium, London, Canada, January 2012, (v) Explanation workshop, Autonomous University of Barcelona, Barcelona, Spain, March 2012.
- (38) “The Unsolvability of the Quintic: A Case Study in Abstract Mathematical Explanation”, Twelfth Annual Midwest PhilMath Workshop, Notre Dame, IN, November 2011.
- (37) “Mathematical Models of Biological Patterns: Lessons from Hamilton’s Selfish Herd”, 14th Congress of Logic, Methodology and Philosophy of Science, Nancy, France, July 2011.
- (36) “Galois, the Quintic and Inference to the Best Explanation in Pure Mathematics”, Association for the Philosophy of Mathematical Practice, Brussels, Belgium, December 2010.
- (35) “Mathematical Knowledge is A Priori, Though Not Conceptual”, (i) Current Projects Seminar, University of Sydney, Sydney, Australia, August 2010, (ii) Kansas State University Philosophy Workshop, Manhattan, KS, April 2011, (iii) Scuola Normale Superiore, Pisa, Italy, December 2011.
- (34) “Representing with Models”, (i) Surrogate Reasoning in Philosophy and Science, Australian National University, Canberra, Australia, August 2010, (ii) The Role of Mathematics in Science Workshop, IHPST, University of Toronto, Toronto, Canada, October 2010, (iii) Kansas State University Philosophy Colloquium, Manhattan, KS, April 2011.
- (33) “Mathematical Contributions to Scientific Explanation”, presented to (i) Society for Exact Philosophy Annual Meeting, Kansas City, MO, March 2010, (ii) Models and Simulations 4, University of Toronto, Toronto, Canada, May 2010.
- (32) “Mathematics and Scientific Failure”, University of Pennsylvania Philosophy Colloquium, Philadelphia, PA, October 2009.
- (31) “Discerning the Truth in Fiction”, presented to (i) Models and Fiction Workshop, School of Advanced Study, University of London, London, UK, March 2009, (ii) Department of History and Philosophy of Science, University of Athens, Athens, Greece, March 2009, (iii) Faculty

- Speaker, 11th Annual Pitt-CMU Graduate Student Philosophy Conference, Pittsburgh, PA, March 2009, (iv) Logic and Language Workshop, National Taiwan University, Taipei, Taiwan, May 2009.
- (30) “The Case for Multiscale Modeling”, Models and Simulations 3, University of Virginia, Charlottesville, VA, March 2009.
- (29) “How to Avoid Inconsistent Idealizations”, presented to (i) Society for Realist/Antirealist Discussion (Group Session), Central Division American Philosophical Association Meeting, Chicago, IL, February 2009, (ii) Department of History and Philosophy of Science, University of Athens, Athens, Greece, March 2009.
- (28) “The Value of Mathematics for Scientific Confirmation”, Symposium contribution, Biennial Meeting of the Philosophy of Science Association, Pittsburgh, PA, November 2008.
- (27) “Abstract Representations and Confirmation”, presented to (i) Pittsburgh Center for the Philosophy of Science Lunchtime Colloquium, September 2008, (ii) University of Missouri Philosophy Colloquium, Columbia, MO, February 2009, (iii) Logic, Language and Science Series, Ohio State University Philosophy Department, Columbus, OH, April 2009.
- (26) “Towards a Philosophy of Applied Mathematics”, New Waves in Philosophy of Mathematics, Miami, FL, April 2008.
- (25) “Russell’s Propositional Functions and the Metaphysical Basis of Logic”, presented to (i) Annual Meeting of the Association for Symbolic Logic, Irvine, CA, March 2008, (ii) Early Analytic Philosophy Conference, Iowa City, IA, April 2008.
- (24) “The Possession Conditions of Arithmetical Concepts”, presented to (i) Indiana University Purdue University Fort Wayne Philosophy Club, Fort Wayne, IN, November 2006, (ii) Edelstein Center, Hebrew University of Jerusalem, Israel, December 2007, (iii) Eastern Division American Philosophical Association Meeting, Baltimore, MD, December 2007.
- (23) “A Priori Contributions to Scientific Knowledge”, Bar-Hillel Colloquium for the History, Philosophy and Sociology of Science, Cohn Institute, Tel Aviv University, Israel, December 2007.
- (22) “Modeling Reality”, Models and Simulations 2, Center for Logic and Philosophy of Science, Tilburg University, Netherlands, October 2007.
- (21) “The Limits of the Relative A Priori”, Soochow International Conference on Analytic Philosophy, Taipei, Taiwan, June 2007.
- (20) “From Sunspots to the Southern Oscillation: Confirming Models of Large-Scale Phenomena in Meteorology”, Confirmation, Induction and Science, London, March 2007.
- (19) “Mathematical Idealization”, presented to (i) Wayne State Philosophy of Mathematics Working Group, February 2006 and (ii) Biennial Meeting of the Philosophy of Science Association, Vancouver, BC, November 2006.
- (18) “The Geisteswissenschaften Debate in Britain: Bradley on the Science of History”, Workshop on Historical Perspectives on “Erklären” and “Verstehen”, Max Planck Institute for the History of Science, Berlin, June 2006.
- (17) “The Scientific Basis for Russell’s External World Program”, presented to (i) Bertrand Russell Society Meeting, Iowa City, IA, May 2006 and (ii) Sixth Biennial Congress of the International Society for the History of Philosophy of Science, Paris, June 2006.
- (16) “An Overlapping Consensus Model of the Origins of Analytic Philosophy”, History of Early Analytic Philosophy Society (Group Session), Eastern Division American Philosophical Association Meeting, New York, NY, December 2005.

- (15) “The Derivation and Application Conditions of the One-dimensional Heat Equation”, 33rd Annual Meeting of the Society for Exact Philosophy, Toronto, May 2005.
- (14) “Dispensing With ‘Mixed’ Mathematical Facts”, presented to (i) Fifth Annual Midwest PhilMath Workshop, Notre Dame, IN, November 2004 and (ii) Society for Realist/Antirealist Discussion (Group Session), Eastern Division American Philosophical Association Meeting, Boston, MA, December 2004.
- (13) “Overextending Partial Structures: Idealization and Abstraction”, presented to (i) Wayne State Philosophy of Mathematics Working Group, March 2004 and (ii) Biennial Meeting of the Philosophy of Science Association, Austin, TX, November 2004.
- (12) “From Philosophy to Psychology and Back: The Role of Richard Semon in Russell’s *Analysis of Mind*”, Fifth Biennial Congress of the International Society for the History of Philosophy of Science, San Francisco, CA, June 2004.
- (11) “Mathematics Makes a Difference”, Central Division American Philosophical Association Meeting, Chicago, IL, April 2004.
- (10) “Russell’s Changing Beliefs”, presented to (i) University of Toronto Analytical Philosophy Group, November 2003 and (ii) Third Annual Early Analytic Philosophy Conference, Purdue University, West Lafayette, IN, April 2004.
- (9) “Russell-Carnap and Analytic Philosophy”, Wayne State Philosophy Colloquium, March 2004.
- (8) “Ideal Fluids and Complex Analysis: A Case Study in ‘Unreasonable’ Effectiveness”, Indiana University Logic Seminar, October 2003.
- (7) “A Reserved Reading of Carnap’s *Aufbau*”, History and Philosophy of Science Colloquium Series, Indiana University, November 2002.
- (6) “Carnap’s Physical Construction System”, Fourth Biennial Congress of the History of Philosophy of Science Working Group, Montreal, June 2002.
- (5) “The Structure of Indispensability Arguments”, 2002 Annual Meeting of the Association for Symbolic Logic, Las Vegas, June 2002. (Abstract, *Bulletin of Symbolic Logic*, 9 (2003): 61.)
- (4) “A New Perspective on Applying Mathematics”, presented to (i) Logic and Philosophy of Science Department, University of California, Irvine, (ii) Philosophy Department, Purdue University, and (iii) Philosophy Department, University of Manitoba, Spring 2002.
- (3) “Carnap and the Unity of Science: 1921-1928”, The Vienna Circle and Logical Empiricism: Re-Evaluation and Future Perspectives on Research and Historiography, Vienna, July 2001.
- (2) “Russell’s Influence on Carnap’s *Aufbau*”, Townsend Center Working Group in History and Philosophy of Logic, Berkeley, May 2000.
- (1) “Carnap’s Engagement with Russell: 1921-1928”, Vienna Circle Institute, Vienna, June 1999.

Comments

- (15) “O. Linnebo, ‘An Ordinal Conception of the Natural Numbers’”, The Emergence of Number, Columbus, OH, June 2018.
- (14) “M. Lange’s ‘What is Explanation in Mathematics?’ and S. Vineberg’s ‘Elements of Mathematical Explanation’”, Invited Symposium, Central Division American Philosophical Association Meeting, St. Louis, MO, February 2015.
- (13) “A. Casullo, *Essays on A Priori Knowledge and Justification*”, Author Meets Critics, Pacific Division American Philosophical Association Meeting, San Diego, CA, April 2014.

- (12) “Replies to Critics: Batterman, Bueno, Ryckman”, Author Meets Critics for Pincock, *Mathematics and Scientific Representation*, Pacific Division American Philosophical Association Meeting, San Francisco, CA, March 2013.
- (11) “Gregory Landini’s ‘Types* of Russellian Facts’”, Russell’s *The Problems of Philosophy*: The Centenary Conference, University of Mississippi, Oxford, MS, November 2012.
- (10) “Prasanta Bandyopadhyay’s ‘The Duhem-Quine Thesis’”, Central Division American Philosophical Association Meeting, Chicago, IL, April 2008.
- (9) “Ranpal Dosanjh’s ‘Real Laws Don’t Have Demonstrative Content’”, Central Division American Philosophical Association Meeting, Chicago, IL, April 2007.
- (8) “Otávio Bueno’s ‘How Structuralism Can Solve the Access Problem’”, Central Division American Philosophical Association Meeting, Chicago, IL, April 2006.
- (7) “Paul Pojman’s ‘From Mach to Carnap: A Tale of Confusion’”, History of Early Analytic Philosophy Society (Group Session), Central Division American Philosophical Association Meeting, Chicago, IL, April 2006.
- (6) “Scott Soames, *Philosophical Analysis in the Twentieth Century*, vol. 1”, Author Meets Critics, Pacific Division American Philosophical Association Meeting, Portland, OR, March 2006.
- (5) “Uljana Feest’s ‘Meaningful Structures: Placing the *Aufbau* in the Context of Holistic Science’”, History of Early Analytic Philosophy Society (Group Session), Eastern Division American Philosophical Association Meeting, Boston, MA, December 2004.
- (4) “Joongol Kim’s ‘Are Numbers Objects?’”, Eastern Division American Philosophical Association Meeting, Washington, D.C., December 2003.
- (3) “Wade Savage’s ‘Carnap’s *Aufbau* Rehabilitated’”, Central Division American Philosophical Association Meeting, Cleveland, April 2003.
- (2) “Yoichi Kaniike’s ‘Carnap and Quine on Logical Truth’”, Pacific Division American Philosophical Association Meeting, San Francisco, March 2001.
- (1) “Alison Simmons’ ‘Sensible Ends: Latent Teleology in Descartes’ Account of Sensations’”, California Scholars in Early Modern Philosophy, Berkeley, September 1998.

Other Presentations

- (9) “Goodman’s New Riddle of Induction”, Philosophy Club, Ohio State, Feb. 2021.
- (8) “Why Read Marx Today?”, Philosophy Club, Ohio State, Jan. 2020.
- (7) “Is Mathematics the Language of Nature?”, (i) Philosophy Club, (ii) Physics Honors Society, Ohio State, October 2018.
- (6) “Kuhn, Truth and Scientific Progress”, Guest Lecture, Scientific Roots, Ohio State, March 2018.
- (5) “Does Science Tell the Truth?”, Philosophy Club, Ohio State, October 2016.
- (4) “Mathematics and Scientific Change”, Arts and Humanities Inaugural Lecture, Ohio State, January 2016.
- (3) “Did the Vienna Circle Require Vienna?”, European Studies at Purdue University, April 2008.
- (2) “Bertrand Russell: Logician, Philosopher and Activist”, Purdue University Student Pugwash, February 2006.
- (1) “When Does a Mathematical Question Become a Philosophical Question?”, Invited Speaker, 22nd Annual Rose-Hulman Undergraduate Mathematics Conference, Terre Haute, IN, March 2005.

Honors and Awards

External

- (4) National Endowment for the Humanities Fellowship, “Explanation, Inference, and Realism”, 2022.
- (3) National Endowment for the Humanities Fellowship, “The Value of Mathematics for Scientific Representation”, 2008-2009.
- (2) Visiting Fellow, Pittsburgh Center for the Philosophy of Science, 2008-2009.
- (1) National Endowment for the Humanities Summer Stipend, “Grasping El Niño: Isolating the Constraints on Large-Scale Mathematical Modeling”, Summer 2005.

Internal

- (11) The Ohio State University, Humanities and Arts Discovery Theme, Pilot Project: Science and Technology Studies, one of six lead faculty, Fall 2016-Spring 2018, director, Spring 2019.
- (10) The Ohio State University, Arts and Humanities Small Grant, Summer 2015.
- (9) The Ohio State University, College of Arts and Sciences, Grant in Aid, Summer 2014.
- (8) University of Missouri International Travel Grant, Summer 2011.
- (7) Purdue College of Liberal Arts International Travel Grant, Spring 2007.
- (6) Purdue Research Foundation Summer Faculty Grant, “Mathematics and the Interpretation of Scientific Theories”, Summer 2006.
- (5) Purdue Research Foundation International Travel Grant, Summer 2006.
- (4) Purdue Research Foundation Summer Faculty Grant, “Mathematical Models and Idealization”, Summer 2003.
- (3) Academic Senate’s Outstanding Graduate Student Instructor Award, U.C. Berkeley, Spring 2001.
- (2) Two Humanities Research Grants, U.C. Berkeley, 1998-1999 & 2000-2001.
- (1) Ralph W. Church Scholarship, U.C. Berkeley, Fall 1996.

Teaching

Mathematics and Science

9830: Philosophy of Science: Reduction	Spring 2012
8650: Philosophy of Science	Knowledge: Spring 2023, Realism: Spring 2020, Causation: Spring 2018, Evidence: Spring 2016, Change: Fall 2014, Explanation: Fall 2012
4005: Philosophy of Mathematics	Spring 2011
3680: Philosophy of Biology	Spring 2017, Spring 2019
3650: Philosophy of Science	Fall 2015, Fall 2013
2680: Scientific Controversies	Spring 2023, Fall 2018, Fall 2019
2900H: Honors Proseminar	Fall 2016
490: Philosophy of Mathematics	Spring 2005
421: Philosophy of Science	Spring 2005, Spring 2003
350: Inductive Logic & Probability	Spring 2007, Spring 2004, Spring 2003
5: Introduction to Philosophy of Science	Summer 2000

History

5260: Wittgenstein	Fall 2017
5250: Hegel’s Phenomenology of Spirit	Fall 2015

3600: Twentieth Century Philosophy	Fall 2011
3260: Movements in 20 th Century Phil.	Fall 2018
3250: Nineteenth Century Philosophy	Spring 2015, Fall 2016, Spring 2018, Spring 2020, Fall 2021
545: Recent Analytic Philosophy	Fall 2006
515: History of Analytic Philosophy II	Spring 2008, Spring 2006
514: History of Analytic Philosophy I	Fall 2007, Fall 2005, Spring 2004
25b: Early Modern Philosophy	Summer 2001

Logic

4120/7120: Selected Topics in Logic	Fall 2011
672: Philosophy of Logic	Truth: Fall 2010, Identity: Spring 2007
450: Symbolic Logic	Fall 2007, Fall 2005, Fall 2004
150: Principles of Logic	Spring 2010, Fall 2006, Fall 2004
12a: Introduction to Logic	Summer 1999

Introductory

8100: First-year Graduate Seminar	Fall 2013, Fall 2019, Fall 2021
1520: Probability and Decision Making	Fall 2017, Spring 2017, Spring 2016, Fall 2014
1200: Logic and Reasoning	Spring 2011
1100: Introduction to Philosophy	Fall 2012
120: Critical Thinking	Fall 2002
110: Introduction to Philosophy	Fall 2010, Spring 2006, Summer 2004, Fall 2002

“Fictionalism”, Guest Lecture, Seminar on Scientific Representation, Prof. M. Thomson-Jones, Oberlin College, Oberlin, OH, April 2013.

“Introduction to the History of Analytic Philosophy”, four-week intensive course, Soochow University, Taipei, Taiwan, May 2009.

Independent Study Supervision: “Wittgenstein and Rule-Following”, Spring 2007. “Probability”, Spring 2007. “Logic and the Foundations of Mathematics”, Spring 2005. Dean’s Scholars Program, “Introduction to the Philosophy of Mathematics”, Spring 2003.

Honors Thesis Supervision: M. McKinney, “An Experiment in Memory” (2019).

Dissertations Advised: D. Olson, “Three Essays on the Constitutive A Priori” (2021). S. An, “Towards a New Non-Ontic Conception of Scientific Explanation” (2023).

Dissertation Committees: T. DeRose, “New Work for Berkeley’s Theory of Divine Language” (2023), S. Harkema, “Berkeley on the Relationship between Metaphysics and Natural Science” (2022), A. Curtis-Trudel, “Towards a Theory of Physical Computation” (2022), S. Dalglish, “Accepting Defeat: A Solution to Semantic Paradox with Defeasible Principles for Truth” (2020), E. Brauer, “The Modal Logic of Potential Infinity”, M. Souba, “Mathematical Certainty” (2019), J. Romaneski, “Engineering the American Military Nation, 1814-1821” (2017, History, reader), T. Kouri, “Logical Instrumentalism” (2016), J. Wright, “Toward a Virtue Account of Science” (2014), J. McGlothlin, “An Examination of the Relationship between God and Logic”

(2014), A. Puzzo, “The Identity of Indiscernibles” (2014, Purdue University, reader), J. Matthewson, “Generality and the Limits of Model-Based Science” (2012, Australian National University, external reviewer), C. Rice, “Optimality Explanations: A New Approach” (2012, reader), D. Molinini, “Toward a Pluralist Approach to Mathematical Explanation of Physical Phenomena” (2011, Université Paris Diderot, Paris 7), D. Finke, “A Defense of Inference to the Best Explanation” (2011, reader), K. Schmor, “Carnap’s Ideal of Philosophical Neutrality” (2010, University of Illinois, Chicago, reader), A. Carmical, “Newton’s Critique of Descartes’ Theory of Motion” (2010), A. Hillman, “Leibniz on Monadic Action and Divine Concurrence” (2008, reader), M. Thune, “The Epistemology of Disagreement” (2008, reader), M. Penner, “Fallibilism and Warrant” (2007, reader).

Graduate Student Instructor: Ten different courses at U. C. Berkeley (1997-2002)

Administrative Activities

Chair, Graduate Admissions Committee, 2018-2021, 2022-2023.

Arts and Humanities Tenure and Promotion Committee, 2015-2018.

Director of Graduate Admissions, 2011-2012.

University Senate, Fall 2010.

College of Liberal Arts Senate, Spring 2010.

Director of Graduate Admissions, Recruitment and Funding, 2007-2008.

Chair, Undergraduate Committee, 2006-2007.

Professional Activities

Consulting Editor, *Studies in the History and Philosophy of Science*

Editorial Board, *The Southern Journal of Philosophy*

Referee

Journals

British Journal for the History of Philosophy, British Journal for the Philosophy of Science, Canadian Journal of Philosophy, Dialectica, Disputatio (Portugal), *Ergo, Erkenntnis, History and Philosophy of Logic, International Studies in the Philosophy of Science, Journal for the General Philosophy of Science, Journal of Philosophical Logic, Journal of Philosophical Research, Mind, Perspectives on Science, Philosopher’s Imprint, Philosophia, Philosophia Mathematica, Philosophical Studies, Philosophical Psychology, Philosophy of Science, Review of Symbolic Logic, Russell, Synthese, Theoria* (Spain), *Thought*.

Other

Danish Council for Independent Research, Institute Vienna Circle Yearbook, Internet Encyclopedia of Philosophy, National Endowment for the Humanities, National Science Foundation, Netherlands Organization for Scientific Research, Oxford University Press, Palgrave, Polish National Science Center, Routledge, Social Sciences and Humanities Research Council of Canada, Wiley-Blackwell.

Co-organizer (with A. Chakravartty), “Scientific Realism, Metaphysics and Epistemic Stances”, Symposium, Biennial Meeting of the Philosophy of Science Association, Pittsburgh, PA, Nov. 2022.

Formerly Review Editor (2014-2016) and Associate Editor (2011-2014), *Journal for the History of Analytical Philosophy*

Invited reviewer, *Mathematical Reviews* and *Zentralblatt Math* (2004-2012).

Co-organizer (with M. Bhadra), Questioning Science in Uncertain Times: A STS Workshop, Columbus, OH, Feb. 2018.

Organizer, “Contexts of Explanation”, Symposium, Biennial Meeting of the Philosophy of Science Association, Atlanta, GA, Nov. 2016.

Co-organizer (with W. Taschek), History of Analytic Philosophy Workshop, Inter University Center, Dubrovnik, Croatia, June 2014.

Organizer, “A Priori Knowledge”, Kline Workshop, University of Missouri, Columbia, MO, March 2013.

Organizer, “The Interpretation and Scope of Models of Complex Systems”, Symposium, 14th Congress of Logic, Methodology and Philosophy of Science, Nancy, France, July 2011.

Organizer, “Applied Mathematics and the Philosophy of Science”, Symposium, Biennial Meeting of the Philosophy of Science Association, Pittsburgh, PA, November 2008.

Organizer, Third Annual Early Analytic Philosophy Conference, Purdue University, West Lafayette, IN, April 2004.

Professional Service

Program Committee, Central Division of the American Philosophical Association, 2022-2023.

Nominating Committee, Central Division of the American Philosophical Association, 2017-2018.

Chair of Session

“Symposium: Carnap’s Legacy for Metaontology”, Central Division American Philosophical Association Meeting, Minneapolis, March 2011.

“Symposium: Schlick, Einstein, and the Early History of Logical Empiricism”, Fifth Biennial Congress of the International Society for the History of Philosophy of Science, San Francisco, CA, June 2004.

“Colloquium: Philosophy of Science”, Central Division American Philosophical Association Meeting, Cleveland, April 2003.

“Colloquium: Metaphysics”, Pacific Division American Philosophical Association Meeting, San Francisco, March 2003.

Professional Societies

American Philosophical Association, Association for the Philosophy of Mathematical Practice, Bertrand Russell Society, International Society for the History of Philosophy of Science, Philosophy of Science Association

Languages

French (reading) and German (reading)