

Curriculum Vitae
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Education:

- Ph.D. Philosophy, University of California at Berkeley, 1998.
 Dissertation: *Theories, Models, and Explanation*.
- M.A. Physics, University of California at Berkeley, 1992.
- B.A. Physics, University of California at Berkeley, 1990.

Employment:

- August 2006 – present: Associate Professor, Department of Philosophy, University of Maryland, College Park.
- August 2003 – July 2006: Assistant Professor, Department of Philosophy, University of Maryland, College Park.
- August 1998 – June 2003: Assistant Professor, Department of Philosophy, Northwestern University.

Other appointments:

Reasearch Associate, Centre for the Philosophy of the Natural and Social Sciences (CPNSS), London School of Economics.

Research, Scholarly and Creative Activities:

a. Fellowships and Awards:

- National Science Foundation Fellowship, award no. SES-0646677, 9/1/2007-8/31/2008, \$131,541.
- National Science Foundation Fellowship, award no. SES-0093212, 8/15/2001-5/31/2002, \$75,000.
- National Endowment for the Humanities Fellowship, award no. FA-36796-01, 6/1/2002-12/31/2002, \$25,000.
- General Research Board, Graduate School, University of Maryland, Semester Award, Fall 2009, \$9,250.
- General Research Board, Graduate School, University of Maryland, Semester Award, Fall 2005, \$9,250.

b. Books:**i. Books authored:**

Inconsistency, Asymmetry, and Non-Locality: A Philosophical Investigation of Classical Electrodynamics, Oxford University Press (2005), 212 pages.

ii. Chapters in books:

- 1) "A New Look at Popper's Pond," in *Karl Popper: A Centenary Assessment*, ed. Ian Jarvie, Ashgate (2007), 77-84.
- 2) "Causation, Counterfactuals and Entropy," in *Russell's Republic: The Place of Causation in the Constitution of Reality*, eds. Huw Price and Richard Corry, Oxford University Press (2007), 351-395.
- 3) "Counterfactuals and Entropy," in *Time, Chance, and Reduction*, eds. Andreas Hüttemann and Gerhard Ernst, Cambridge University Press (forthcoming).
- 4) "No place for Causes?" *Proceedings of the 2007 EPSA conference*, Springer (forthcoming).

c. Articles in Refereed Journals:

- 1) "Van Fraassen's Dissolution of Putnam's Model-Theoretic Argument," *Philosophy of Science*, 66 (March 1999), 158-164.
- 2) "(Dis-)Solving the Puzzle of the Arrow of Radiation," *British Journal for the Philosophy of Science* 51 (September 2000), 381-410.
- 3) "Non-Locality in Classical Electrodynamics," *British Journal for the Philosophy of Science* (March 2002), 1-19.
- 4) "Classical Electrodynamics and the Role of Consistency in Scientific Theories," *Philosophy of Science* 71 (October 2004), 525-549.
- 5) "Laws and Initial Conditions," *Philosophy of Science* 71:5 (December 2004), 696-706.
- 6) "Mechanisms, Principles, and Lorentz's Cautious Realism," *Studies in the History and Philosophy of Modern Physics* 36, 4 (December 2005), 659-679.
- 7) "Counterfactuals and the Past Hypothesis," *Philosophy of Science* 72: 5 (December 2005), 739-750.
- 8) "A Tale of Two Arrows," *Studies in the History and Philosophy of Modern Physics* 37 (2006), 542-558.
- 9) "Conceptual Problems in Classical Electrodynamics," *Philosophy of Science* 75:1 (January 2008), 93-105.

- 10) “Philosophical Issues in Electromagnetism,” *Philosophy Compass* 4/1 (2009): 255–270, 10.1111/j.1747-9991.2008.00192.x.
- 11) “‘The most Sacred Tenet’? Causal Reasoning in Physics,” *British Journal for the Philosophy of Science* 60 (September 2009) doi:10.1093/bjps/axp029, 459-474.
- 12) “Causality and dispersion: a reply to John Norton,” *British Journal for the Philosophy of Science* 60 (September 2009) doi:10.1093/bjps/axp031, 487-495.
- 13) “Causes, Counterfactuals, and Non-Locality,” *Australasian Journal of Philosophy* (forthcoming).

d. Book Reviews, Other Articles, Notes:

- 1) “The World According to Maxwell,” Discussion Paper Series of the Centre for the Philosophy of the Natural and the Social Sciences, London School of Economics (*Measurement in Physics and Economics Discussion Papers* 1/1999).
- 2) “Nancy Cartwright’s *The Dappled World: A Study of the Boundaries of Science*,” book review together with: E. Winsberg, A. Fine, K. Darling. *The Journal of Philosophy* XCVII, 7 (July 2000), 403-408.
- 3) “Causation and the Past Hypothesis,” Discussion Paper Series of the Centre for the Philosophy of the Natural and the Social Sciences, London School of Economics (*Causality: Metaphysics and Methods – Discussion Papers* 16/2004).
- 4) “Stephan Hartmann, Carl Hoefer, and Luc Bovens (eds.) *Nancy Cartwright’s Philosophy of Science*”, book review. Notre Dame Philosophical Reviews (March 2009)

e. Talks:

i. Invited talks:

- 1) “Models as Truth-Makers and Models as Representations,” Department of Philosophy, University of Leeds, England, February 1997.
- 2) “Models in Electrodynamics and the Semantic View of Scientific Theories,” Centre for the Philosophy of the Natural and the Social Sciences, London School of Economics, England, May 1997.
- 3) “Explanatory Patterns,” History and Philosophy of Science Colloquium, University of Colorado, Boulder, December 1997.
- 4) “Explanatory Patterns,” Northwestern University, February 1998.
- 5) “Explanatory Patterns,” University of Maryland, Baltimore County, February 1998.
- 6) “In Search of Coherence? The Strange Tale of Classical Electrodynamics” History and Philosophy of Science Colloquium Series, Northwestern University, February 1999.
- 7) “Local Models, Possible Worlds, and Classical Electrodynamics,” California Institute of Technology, Los Angeles, November 1999.
- 8) “Explanatory Asymmetries: A Problem for Causal Theories of Explanation?” University of Manitoba, Canada, January 2001.
- 9) “Boltzmann’s account of the thermodynamic asymmetry.” University of Illinois at Chicago Philosophy of Physics Workshop, March 2001, Commentator on a paper by Craig Callender.

- 10) “The Influence of Science on Philosophy in the Late 19th Century: Comments on Papers by Michael Friedman and Mark Wilson,” May 2001, Symposium at the 2001 APA Central Division meeting.
- 11) “Non-Locality in Classical Electrodynamics,” University of Southern California, November 2001.
- 12) “Classical Electrodynamics and the Role of Consistency in Scientific Theories,” University of California at Irvine, January 2002
- 13) “Classical Electrodynamics and the Role of Consistency in Scientific Theories,” University of Pittsburgh, February 2002.
- 14) “Classical Electrodynamics and the Role of Consistency in Scientific Theories,” University of Maryland, College Park, February 2002.
- 15) “The Puzzle of the Arrow of Radiation,” Department of Physics, University of Southern California, April 2002.
- 16) “David Lewis’s Overdetermination Thesis or The Perils of Armchair Physical Theorizing,” Centre for the Philosophy of the Natural and the Social Sciences, London School of Economics, May 2002.
- 17) “David Lewis’s Overdetermination Thesis or The Perils of Armchair Physical Theorizing,” University of Sydney, October 2002
- 18) “David Lewis’s Overdetermination Thesis or The Perils of Armchair Physical Theorizing,” University of Maryland, College Park, December 2002.
- 19) “David Lewis’s Overdetermination Thesis or The Perils of Armchair Physical Theorizing,” University of California at Santa Barbara, January 2003
- 20) “David Lewis’s Overdetermination Thesis or The Perils of Armchair Physical Theorizing,” University of Minnesota, Twin Cities, January 2003
- 21) “Counterfactuals and the Past Hypothesis,” invited speaker at the symposium “Entropy and Counterfactuals,” 2003 APA Central Division Meeting, Cleveland, April 2003.
- 22) “The ‘Arrow’ of Radiation and Entropy,” invited speaker at the annual University of Western Ontario Philosophy of Science Conference, May 2003.
- 23) “Causation, Counterfactuals and Entropy.” Invited speaker at the conference “Causal Republicanism,” Sydney, July 2003.
- 24) “David Lewis’s Overdetermination Thesis or The Perils of Armchair Physical Theorizing.” SUNY Buffalo, February 2004.
- 25) “The Limits of Mathematical Representations in Science,” workshop on mathematical representations at Stanford University, April 2004.
- 26) “Entropy and the Arrow Radiation,” invited speaker at the workshop “Time’s Arrow: Physics and Philosophy,” Belgium, May 2004
- 27) Invited participant in the workshop “The Origins and Functions of Causal Thinking” organized by Maria Carla Galavotti, Chris Hitchcock, Peter Menzies, Huw Price, and Jim Woodward. Venice, Italy, May 2004.
- 28) “Causation, Counterfactuals and Entropy,” University of Munich, June 2004.
- 29) “David Lewis’s Overdetermination Thesis or The Perils of Armchair Physical Theorizing.” University of Maryland, Baltimore County, Philosophy Club, November 2004.
- 30) Invited participant and presenter at the workshop “Descrying the world in physics” at Rutgers University, April 2005.
- 31) “Probabilities, Counterfactuals, and Entropy,” Universität Konstanz, July 2005.
- 32) “Causation in Fundamental Physics,” Universität Münster, July 2005.
- 33) Author-meets-critics session on my *Inconsistency, Asymmetry and Non-Locality* at the 2005 meeting of the Western Canadian Philosophical Association, Winnipeg, October 2005 (critics: Steve Savitt, UBC, and Gordon Belot, Pittsburgh).
- 34) “Counterfactuals and the Past-Hypothesis,” Workshop on Time, Chance and Reduction—Philosophical Aspects of Statistical Mechanics, Munich, March 2006.

- 35) Author-meets-critics session on my *Inconsistency, Asymmetry and Non-Locality* at the 2006 APA Pacific Division Meeting, Portland, March 2006 (critics: Mark Wilson, University of Pittsburgh, Robert Batterman, University of Western Ontario, Sheldon Smith, UCLA).
- 36) “Causes, Entropy, and Agency,” Conference on “The Origins and Functions of Causal Thinking, III,” Sydney University, Sydney, July 2006.
- 37) “Causation in Physics,” Boston Colloquium for Philosophy of Science, November 2006.
- 38) “Causal Reasoning in Physics,” Workshop on Causation at the University of North Carolina, Chapel Hill, March 2007.
- 39) “Causal Reasoning in Physics,” Conference ‘Causation and Mechanism, University of Maryland, College Park 2007.
- 40) “Casual Reasoning in Physics,” Munich, July 2007.
- 41) “Counterfactuals and the Past-Hypothesis,” Workshop on Causation and Physics, Barcelona, September 2007.
- 42) “Causal Reasoning in Physics,” Workshop on Causation at the Center for Philosophy of Science, Pittsburgh University, January 2008.
- 43) “‘The Most Sacred Tenet?’—Causal Reasoning in the Derivation of Dispersion Relations,” Workshop on Causation and Non-Locality, Tilburg University, The Netherlands, June 2008.
- 44) “Conceptual Problems in Classical Electrodynamics,” Workshop on Inconsistency in Science, University of Leeds, UK, June 2008.
- 45) “Russell Revisited: Skepticism about Causes,” Texas Tech University, October 2008.
- 46) “‘The most sacred tenet’: Causal Reasoning in Physics,” Texas Tech University, October 2008.
- 47) “The causal and thermodynamic asymmetries revisited”, Conference on the foundations of statistical physics, Rutgers University, May 2009 (invited).
- 48) “The metaphysics and the physics of Causation,” Conference on Metaphysics in Science, Melbourne, July 2009 (invited).

ii. Refereed conference presentations:

- 1) “A Re-examination of the Distinction between a Context of Discovery and a Context of Justification,” 10th International Congress of Logic, Methodology and Philosophy of Science, Florence, Italy, August 1995.
- 2) “Truth and Isomorphism: Van Fraassen’s Explication of ‘Empirical Adequacy’,” 3rd International Conference of the German Society of Analytic Philosophy, Munich, Germany, September 1997.
- 3) “Explanatory Asymmetries: A Problem for Causal Theories of Explanation?” 11th International Congress of Logic, Methodology and Philosophy of Science, Cracow, Poland, August 1999.
- 4) “Non-Locality in Classical Electrodynamics,” APA Pacific Division Meeting, San Francisco, March 2001.
- 5) “David Lewis’s Overdetermination Thesis or The Perils of Armchair Physical Theorizing,” Causation and Explanation in the Natural and Social Sciences, Ghent University, Belgium, May 2002.
- 6) “Lorentz’s Cautious Realism and the Electromagnetic World-Picture,” History of the Philosophy of Science Conference 2002, Montreal, Canada, June 2002.
- 7) “Popper’s Pond and Elementary Radiation Processes: Popper and Einstein on the Arrow of Radiation,” Karl Popper Centennial Conference 2002, Vienna, July 2002.
- 8) “Laws and Initial Conditions,” contribution to the symposium “Laws, Possibility, and the New Instrumentalism,” Philosophy of Science Association Meeting, November 2002.

- 9) "Causes, Counterfactuals, and Entropy," Northwest Philosophy Conference, Reed College, October 2003.
- 10) "David Lewis's Thesis of an Overdetermination of the Past by the Present," APA Central Division Meeting, Chicago, April 2004.
- 11) "Barry Loewer's Entropy Account of Counterfactuals," Philosophy of Science Association Meeting, November 2004.
- 12) "Causes, Counterfactuals, and Non-Locality," 2005 APA Pacific Division Meeting, San Francisco, March 2005.
- 13) "Causal Reasoning in Physics," First Congress of the European Philosophy of Science Association (EPSA I), Madrid, November 2007.
- 14) "Causal Reasoning in Physics," European Congress in Analytic Philosophy, Cracow, Poland, August 2008.
- 15) "Causes, Counterfactuals, and Non-Locality," Australasian Association of Philosophy Conference, Melbourne, Australia, July 2009 (non-refereed.)
- 16) "Principle of Constructive Relativity?" Second Congress of the European Philosophy of Science Association (EPSA II), Amsterdam, October 2009.
- 17) "Lewisian Laws and Probabilities in Statistical Mechanics," Symposium on Laws, Chances, and Measures in Thermodynamics and Statistical Mechanics, Second Congress of the European Philosophy of Science Association (EPSA II), Amsterdam, October 2009.

f. Grants:

Travel grant from the Philosophy of Science Association, 2002, \$300.

International travel grant from the University of Maryland, June 2004, \$675.

g. Major Conferences Organized:

"Causation and Mechanism," University of Maryland, May 4-6, 2007

h. Reviewing Activities for Journals and Other Learned Publications:

Oxford University Press
Cambridge University Press
Norton Publisher
Philosophy of Science
Studies in History and Philosophy of Modern Physics
British Journal for the Philosophy of Science
Canadian Journal of Philosophy
Erkenntnis
Foundations of Physics
University of Chicago Press
Journal of Philosophical Logic
MIT Press

3. Teaching, Mentoring and Advising:

a. Courses taught in the last five years:

i. University of Maryland:

PHIL250: Introduction to the philosophy of science

Fall 2003 (approx. 35 students)

Spring 2004 (35 students)

Fall 2004 (65 students)

Fall 2006 (65 students)

HONR229F: Puzzles about time in philosophy, literature, and film

Fall 2003 (25 students)

PHIL858: Graduate seminar: Causation

Spring 2004 (6 students)

Fall 2008 (15 students)

PHIL428M: Topics in history of modern philosophy: David Hume

Fall 2004 (25 students)

Spring 2009 (25 students)

PHIL364: Metaphysics

Spring 2005 (35 students)

Fall 2006 (35 students)

Spring 2009 (35 students)

PHIL454: Philosophy of Space and Time

Spring 2005 (25 students)

Fall 2008 (25 students)

PHIL651: Philosophy of Science

Fall 2006 (5 students)

PHIL858: Graduate Seminar: Science and Values

Spring 2006 (4 students)

PHIL2??T: Time in Philosophy, Literature, Film, and Science

Summer 2009 (9 students)

ii. Northwestern University:

History of modern philosophy: Spring 2003 (90 students)

Philosophy of science: Winter 2003, Spring 2003 (15 students)

First year graduate seminar in analytic philosophy: Winter 2001 (8 students)

Freshman seminar, Rationality and revolutions in science: Spring 2001 (15 students)

Freshman seminar, Philosophy of time: Spring 2003 (15 students)

Introductory Logic: Fall 2000 (150 students)

b. Professional Development:

Selected participant in the Center for Teaching Excellence's 2008 Summer Institute on Teaching with New(er) Technology.

4. Service:

a. Professional:

ii. Reviewing activities for agencies:

National Science Foundation (2002, 2008).
American Council of Learned Societies (2006, 2007).
Israel Science Foundation (2008).

b. Campus:

i. Departmental:

Placement Officer, Department of Philosophy: 2003-2005. Spring 2006-Spring 2007, Fall 2008-Spring 2009)
Graduate Affairs Committee: member, 2003-2005. Fall 2006-Spring 2007, Fall 2008-Spring 2009
Graduate Summer Fellowship Committee: 2004, 2005.
Graduate Admissions: Spring 2006, 2007
Salary Committee: Spring 2006, 2007
Internal committee for external review: Spring 2006.
Formal Epistemology Search Committee (chair). Fall 2008- Spring 2009.

ii. College:

Philosophy Department Chair Search Committee (member): Spring 2008.
Worldwise Committee (member): 2008-2009.

References:

Prof. James Woodward
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