

KEVIN DAVEY

CONTACT DETAILS

MAILING ADDRESS:
University of Chicago
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EDUCATION

Ph. D., Philosophy, University of Pittsburgh, 2004.
M. A., Physics, University of Pittsburgh, 2003.
M. A., Mathematics, University of California at Los Angeles, 1996.
(entered Ph.D. program, ABD.)
B. Sc. (honors), Monash University (Australia), 1992.

AREAS OF SPECIALIZATION

Philosophy of Physics
Philosophy of Science
Logic, Philosophy of Mathematics

AREAS OF COMPETENCE

Epistemology

POSITIONS HELD

University of Chicago, Associate Professor, Department of Philosophy, 2012–present.
University of Chicago, Assistant Professor, Department of Philosophy, 2005–2012.
Member of CHSS (Committee on Conceptual and Historical Studies of Science at the University of Chicago, 2006–present.)
University of Kansas, Assistant Professor, Department of Philosophy, 2004–2005.

PUBLICATIONS

• PEER REVIEWED ARTICLES

- “Can Good Science be Logically Inconsistent?”, *Synthese*, May 2014, 10.1007/s11229-014-0470-x
- “Thermodynamic Entropy and its Relation to Probability in Classical Mechanics”, *Philosophy of Science*, (78), December 2011, p. 955-975.
- “Idealizations and Contextualism in Physics”, *Philosophy of Science*, (78), January 2011, pp. 16–38
- “What is Gibb’s Canonical Distribution?”, *Philosophy of Science*, (76), December 2009, pp. 970–983.
- “The Justification of Probability Measures in Statistical Mechanics”, *Philosophy of Science* (75), January 2008, 28-44.
- “Closed Systems, Explanations and the Cosmological Argument,” *International Journal for Philosophy of Religion*, Volume 62, Number 2, October, 2007 (with M. Lippellman.)
- “Aristotle, Zeno, and the Stadium Paradox”, *History of Philosophy Quarterly*, 24(2) April 2007, pp. 127-136.
- “Relic Abundance of Heavy Particles: Quantum Kinetics versus Boltzmann” (with D. Boyanovsky), *Physical Review D*, 71, 023523 (2005).
- “Is Mathematical Rigor Necessary in Physics?” *British Journal for the Philosophy of Science*, Volume 54, Issue 3, pp. 439-463 (2003).
- “Obligation and the Conditional in Stit Theory,” *Studia Logica*, 72, pp. 339-362 (2002).
- “Insufficient Reason in the ‘New Cosmological Argument’,” (with R. Clifton), *Religious Studies*, 37, pp. 485-490 (2001).
- “Inseparability in Recursive Copies,” *Annals of Pure and Applied Logic*, 68(1), pp. 1-52 (1994).

• REVIEWS

Review of “The Principle of Sufficient Reason: A Reassessment” by A. Pruss, *Religious Studies* (2007), 43, pp. 500-503

Review of “Debating Design: from Darwin to DNA” by W. Dembski, M. Ruse (eds), *Philosophical Books*, 47(4), October 2006, pp. 383–386.

• ARTICLES UNDER REVIEW

“Rethinking Gibbsian Calculations in Equilibrium Statistical Mechanics”

FELLOWSHIPS AND AWARDS

Andrew Mellon Predoctoral Fellowship, University of Pittsburgh, 2003.
Alan Ross Anderson Fellowship, University of Pittsburgh, 1999.
Chancellor's Fellowship, University of California at Los Angeles, 1993.

PROFESSIONAL EXPERIENCE

Advanced Science Letters – Editorial Board

UNIVERSITY OF CHICAGO

Director of Undergraduate Studies, 2012-present
Formal Philosophy Workshop Co-ordinator, 2010-2011
Graduate Admissions (Philosophy), 2010.
Formal Philosophy Workshop Co-ordinator, 2008-2009
Graduate Admissions (Philosophy), 2008.
MAPH Admissions (Philosophy), 2008.
Harper Schmidt Fellowship Committee 2007-2008.
Philosophy Colloquium Co-ordinator 2007-2008.
Co-ordinator of Chicago Philosophy of Physics Group 2007-2008.
Graduate Admissions (Philosophy), 2007.
Graduate Admissions (CHSS), 2007.
Selection Committee for Division-wide Graduate Achievement Awards, 2007.
Lee Prize Committee, 2007.
Stuart Tave Award Committee, 2006.
Undergraduate Program Committee, 2006.
Undergraduate Prize Committee, 2006.

UNIVERSITY OF PITTSBURGH

Editorial Assistant, Studies in History and Philosophy of Modern Physics, 2001–2002.
Administrator for PhilSci-Archive (web archive for papers in philosophy of science), 2000–2002.

COURSES RECENTLY TAUGHT

Introduction to the Philosophy of Science
Philosophy of Mathematics
The Problem of Induction
Non-Deductive Inference
Space and Time
Statistical Mechanics and the Arrow of Time

Philosophical Foundations of Quantum Mechanics
Elementary Logic
Intermediate Logic I (Soundness and Completeness)
Intermediate Logic II (Godel's Incompleteness Theorems)

PRESENTATIONS

"Frequentism and Probability", History and Philosophy of Science Colloquium Series, Indiana University, January 2011

"Thermodynamic Entropy and its Relation to Probability in Classical Mechanics", Philosophy of Science Association Annual Meeting, November 2010

"What is the Canonical Distribution?", Commission for Atomic Energy (CEA-Saclay), Paris, April 2009.

"Conceptual and Technical Problems with Gibbs' Canonical Distribution", Philosophy of Science Association Annual Meeting, November 2008

"Idealizations in Physics", Korea University, July 2008.

"Justifying Probability Measures in Statistical Mechanics", Pacific APA, 2008.

"Science, Religion and Public Policy", University of Chicago Humanities Day, 2007.

"Idealizations in Physics", University of Chicago CHSS Colloquium, 2007.

"Probability in Statistical Mechanics", Chicagoland Philosophy of Physics Association, 2006.

"What Can We Infer from Extremely Improbable Events?" Northwestern University, 2006.

"Skepticism and Statistical Mechanics", University of Chicago Franke Center Talk, 2006.

"On the Unreasonable Effectiveness of Mathematics in Physics", University of Kansas Physics Colloquium, 2005. (Also given elsewhere.)

"Is Mathematics the Language of Nature?", Pitt-CMU Graduate Student Conference, 2003.

REVIEWER FOR

Philosophy of Science, British Journal for the Philosophy of Science, Synthese, Advanced Science Letters.

DISSERTATION

TITLE: “Problems in Applying Mathematics: On the Inferential and Representational Limits of Mathematics in Physics.”

DIRECTORS: Rob Clifton and John Norton.

COMMITTEE: Laura Ruetsche, John Earman, Mark Wilson, Ken Manders, Robert Geroch.