

Eric B. Winsberg

PHILOSOPHY OF SCIENCE · PHILOSOPHY OF PHYSICS · PHILOSOPHY OF CLIMATE SCIENCE

Department of Philosophy; University of South Florida 4202, East Fowler Avenue, FA0226; Tampa, Florida 33620-7926

☎(+1) 727-798-4060 | ✉eric.winsberg@gmail.com | 🏠http://www.winsberg.net

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Employment

- 2014 - **Professor of Philosophy**, University of South Florida *Tampa, Florida, USA*
- 2006 - **Associate Professor of Philosophy**, University of South Florida *Tampa, Florida, USA*
- 2001 - **Assistant Professor of Philosophy**, University of South Florida *Tampa, Florida, USA*
- 1999 - **Postdoctoral Fellow**, Northwestern University *Evanston, IL, U.S.A*

Education

- 1999 **Ph.D. in History and Philosophy of Science**, Indiana University *Bloomington, IN*
- 1989 **B.A., History, Philosophy and Social Studies of Science and Medicine**, University of Chicago *Chicago, IL*

Visiting Fellowships

- 2016 **Senior Fellow**, Institute for Advanced Study, Leuphana University *Lüneburg, Germany*
- 2013 **Fellow**, Center for Advanced Study, MCMP, Ludwig Maximilians Universität *Munich, Germany*
- 2013 **Visiting Scholar**, Department of Philosophy, University of California *Berkeley, CA, USA*
- 2008 **Fellow**, Institute of Advanced Study, University of Durham *Durham, UK*
- 2006 **Fellow**, Center for Interdisciplinary Studies (ZiF), University of Bielefeld *Bielefeld, Germany*

Books

Philosophy and Climate Science *Cambridge University Press*

ERIC WINSBERG

2018

- An introduction to the major topics in the philosophy of climate science

Science in the Age of Computer Simulation *University of Chicago Press*

ERIC WINSBERG

2010

- Short list for the 2011 Lakatos Award
- Reviewed in: *Science, Physics Today, Metascience, Notre Dame Philosophical Reviews, Theoria, Minds and Machines.*
- Author meets critics at 2011 Eastern APA

Climate Modeling: Philosophical and Conceptual Issues *Palgrave Macmillan*

ELISABETH S. LLOYD AND ERIC WINSBERG, EDS.

2018

- A collection of papers on the foundations of climate models. Confirmed contributors include Nancy Cartwright, Mathias Frisch, Reto Knutti, Michael Mann, Linda Mearns, Jonathan Rougier, Ben Santer, Nancy Cartwright, Elisabeth Lloyd, Jay Odenbaugh, Naomi Oreskes, Wendy Parker, and Eric Winsberg

Edited Journals

- 2014 **Special Issue on Climate Science**, *Journal for General Philosophy of Science*

Journal Articles

What does Robustness Teach us in Climate Science: a re-appraisal

Synthese

[Winsberg, E.](#)

2018

Values and Evidence: How Models Make a Difference

European Journal for Philosophy of Science

[Parker, W., Winsberg, E.](#)

2017

The Adventures of Climate Science in the Sweet Land of Idle Dreams

Studies in History and Philosophy of Modern Physics

[Winsberg, E., Goodwin, W.](#)

2016

Missing the Forest for the Fish: how much does the ‘hawkmoth effect’ threaten the viability of climate projections?

Philosophy of Science

[Goodwin, W., Winsberg, E.](#)

2016

Confirmation via Analogue Simulation: What Dumb Holes Could Tell us About Gravity

British Journal for the Philosophy of Science

[Dardashti, R., Thébault, K., Winsberg, E.](#)

2015

Accountability and Values in Radically Collaborative Research

Studies in History and Philosophy of Science

[Winsberg, E., Huebner, B., Kukla, R.](#)

2014

Bumps on the Road to Here (from Eternity)

Entropy 14(3), 390-406

[Winsberg, E.](#)

2012

Values and Uncertainties in the Predictions of Global Climate Models

Kennedy Institute of Ethics Journal 22 (2), 111-137

[Winsberg, E.](#)

2012

Holism, Entrenchment, and the Future of Climate Model Pluralism

Studies in History and Philosophy of Modern Physics 41 (3): 253-262

[Lenhard, J., and Winsberg, E.](#)

2012

A Tale of Two Methods

Synthese 169 (3): 575-92

[Winsberg, E.](#)

2009

Laws and Chances in Statistical Mechanics

Studies in History and Philosophy of Modern Physics 39 (4): 872-888

[Winsberg, E.](#)

2008

Handshaking Your Way to the Top: Inconsistency and falsification in intertheoretic reduction

Philosophy of Science 73: 582-594

[Winsberg, E.](#)

2006

Models of Success vs. the Success of Models: Reliability without truth

Synthese 152: 1-19

[Winsberg, E.](#)

2006

Laws and Statistical Mechanics

Philosophy of Science 71: 707-718

[Winsberg, E.](#)

2004

Can Conditionalizing on the “Past Hypothesis” Militate Against the Reversibility Objections?

Philosophy of Science 71: 489-504

[Winsberg, E.](#)

2004

winner of 2004 award for outstanding Philosophy of Science article by a recent Ph.D

Quantum Life: Interaction, Entanglement, and Separation

Journal of Philosophy C: 80-97

[Winsberg, E. and Fine, A.](#)

2003

- Simulated Experiments: Methodology for a Virtual World** Winsberg, E.
Philosophy of Science 70: 105-125 2003
- Simulations, Models, and Theories: Complex Physical Systems and their Representations** Winsberg, E.
Philosophy of Science 68: S442-S454 2001
- Sanctioning Models: The Epistemology of Simulation** Winsberg, E.
Science in Context 12 (3): 275-92 1999

Encyclopedia Entries

- Computer Simulation in Science** Winsberg, E.
Stanford Encyclopedia of Philosophy 2013
- Computer Simulation and the Philosophy of Science** Winsberg, E.
Philosophy Compass, VOL 4 2009
- Simulation** Winsberg, E.
Oxford Companion to the History of Science 2002

Book Chapters

- Uncertainty Quantification in Climate Modelling** Winsberg, E.
Philosophical and Conceptual Issues in Climate Modeling, EDITED BY WINSBERG, E. AND LLOYD, E., PALGRAVE
 MACMILLAN 2018
- The Metaphysical Foundations of Statistical Mechanics: on the status of PROB and PH** Winsberg, E.
Time's arrow and the Probability Structure of the World, EDITED BY LOEWER, B., WINSBERG, E. AND WESLAKE, B.,
 HARVARD UNIVERSITY PRESS 2018
- Success and Scientific Realism: Considerations from the Philosophy of Simulation** Winsberg, E. and Mirza, A.
Routledge Handbook on Scientific Realism, EDITED BY JUHA SAATSI, ROUTLEDGE 2017
- Making an Author in Radically Collaborative Research** Huebner, B., Kukla, R. and Winsberg, E.
The Collective Dimensions of Science, EDITED BY WEISBERG, MAYO-WILSON AND BOYER, OXFORD UNIVERSITY
 PRESS 2017
- Deflationism, Pragmatism, and Metaphysics** Kukla, R., and Winsberg, E.
Aspects of Anti-Representationalism: Truth, Expression, Normativity, and Naturalism, EDITED BY STEVEN
 GROSS, NICHOLAS TEBBEN, AND MICHAEL WILLIAMS, OXFORD UNIVERSITY PRESS 2015
- A Function for Fictions: Expanding the scope of science** Winsberg, E.
Fictions in Science: Philosophical Essays on Modeling and Idealization EDITED BY SUAREZ, M., ROUTLEDGE
2009
- Value Judgments and the Estimation of Uncertainty in Climate Modeling** Biddle, J. and Winsberg, E.
New Waves in the Philosophy of Science, EDITED BY MAGNUS, P.D., AND BUSCH, J., PALGRAVE MACMILLAN
2009

Book Reviews

Simulation and Similarity

Notre Dame Philosophical Reviews

Michael Weisberg

2013

Science without Laws: Model Systems, Cases, Exemplary Narratives

Metascience, 18(2): 265-8

A. Creager & E. Lunbeck, eds

2009

Model-Based Reasoning Technology, Science, Values

Philosophy of Science

L. Magnani & N. Nersessian, eds.

2003

The Dappled World: Essays on the Boundaries of Science

Journal of Philosophy

Nancy Cartwright

2002

with Frisch, M., Darling, K., and Fine, A.

Invited keynotes, plenaries, etc.

Simulation in Cosmology

AMERICAN PHILOSOPHICAL ASSOCIATION PACIFIC DIVISION MEETING

- Invited symposium on physics and cosmology in practice

Washington, DC

April, 2017

'Testing this Extraordinary Scenario': Simulation and models of Big Bang cosmology

METHODOLOGY AND EPISTEMOLOGY IN COSMOLOGY CONFERENCE

- Plenary talk

Irvine, California

February, 2017

Confirmation in Analog and Computer Simulation

AMERICAN PHILOSOPHICAL ASSOCIATION EASTERN DIVISION MEETING

- Invited symposium on computer simulation

Washington, DC

January, 2016

Threats to Model Confidence: A Cautionary Tale

DESIGN MODELING SYMPOSIUM

- Keynote Address

Copenhagen, Denmark

October, 2015

How important is the Hawkmoth Effect for Climate Science?

KNOWLEDGE AND MODELS IN CLIMATE SCIENCE

- Plenary talk

Rotman Institute, London, ON, CA

October, 2014

Values and Uncertainties in Climate Modeling

VALUES AND NORMS IN MODELING

- Keynote Address

Eindhoven, Netherlands

June, 2012

Author Meets Critics: Science in the Age of Computer Simulation

AMERICAN PHILOSOPHICAL ASSOCIATION EASTERN DIVISION MEETING

- Critics: Isabelle Peschard, Wendy Parker

Washington, DC

December 2011

Verification and Validation

SCIENTIFIC MODELING AT SFU: THEMATIC YEAR 2011

- Keynote Address

IRMACS, Burnaby, BC, Canada

April, 2011

Other Presentations

SELECTED INVITED PRESENTATIONS SINCE 2013

Probability in Weather and Climate

DEPARTMENT COLLOQUIUM

Ruhr-Universität Bochum

June 2016

Confirmation in Analog and Computer Simulation DEPARTMENT COLLOQUIUM	<i>Leibniz Universität Hannover</i> April 2016
Confirmation in Analog and Computer Simulation INTERFERENCES EVENTS	<i>MECS, Universität Leuphana</i> January 2016
Confirmation in Analog and Computer Simulation MODELING AND REPRESENTATION CONFERENCE	<i>San Sebastian, Spain</i> December 2015
Reflections on the Relationship between Verification and Validation in Computer Simulation WORKSHOP ON "THE ART AND SCIENCE OF SIMULATION"	<i>Stuttgart, Germany</i> October 2015
Reflections on the Relationship between Verification and Validation in Computer Simulation WORKSHOP ON "HOW TO BUILD TRUST IN COMPUTER SIMULATIONS: TOWARDS A GENERAL EPISTEMOLOGY OF VALIDATION."	<i>Hannover, Germany</i> July 2015
Values and uncertainties in the predictions of global climate models WORKSHOP ON "UNCERTAINTY IN CLIMATE MODELING"	<i>Pittsburgh Center for the Philosophy of Science, PA</i> February 2015
The adventures of climate science in the sweet land of idle arguments WORKSHOP ON "CLIMATE MODELING AND PUBLIC POLICY" • joint work with William Goodwin	<i>University of Pittsburgh Philosophy Department, PA</i> February 2015
Confirmation via Analogue Simulation: What Dumb Holes Could Tell us About Gravity MODELS AND EXPERIMENTS WORKSHOP • joint work with Radin Dardashti and Karim Thébault	<i>Geneva, Switzerland</i> June, 2014
How anti-realists could learn to stop worrying and love unobservables DEPARTMENT COLLOQUIUM	<i>University of Maryland</i> March, 2014
How anti-realists could learn to stop worrying and love unobservables REDUCTION AND EMERGENCE IN SCIENCE WORKSHOP	<i>LMU, Munich, Germany</i> July, 2013
Confirmation via Analogue Simulation: What Dumb Holes Could Tell us About Gravity REDUCTION AND EMERGENCE IN SCIENCE WORKSHOP • with Radin Dardashti and Karim Thébault	<i>LMU, Munich, Germany</i> July, 2013
Handshaking Your Way to the Top MULTISCALE MODELING AND ARCHITECTURE. CENTER FOR INFORMATION TECHNOLOGY AND ARCHITECTURE	<i>Copenhagen, Denmark</i> May 2013
Fuzzy Modularity CULTURES OF ENERGY SPRING SYMPOSIUM	<i>Rice University, Houston, TX</i> April 2013
Climate Uncertainty and Ambiguity Aversion LMPS COLLOQUIUM	<i>UC, Berkeley</i> March 2013

SELECTED RECENT SUBMITTED PRESENTATIONS

Missing the Forest for the Fish: uncertainty in climate modeling

Chicago, IL

PHILOSOPHY OF SCIENCE ASSOCIATION

November 2014

- with William Goodwin

Confirmation via Analogue Simulation: What Dumb Holes Could Tell us About Gravity

Chicago, IL

PHILOSOPHY OF SCIENCE ASSOCIATION

November 2014

- with Radin Dardashti and Karim Thébault

Confirmation via Analogue Simulation: What Dumb Holes Could Tell us About Gravity

Cambridge, UK

BRITISH SOCIETY FOR THE PHILOSOPHY OF SCIENCE

November 2014

- with Radin Dardashti and Karim Thébault

Deflationism, Pragmatism and Metaphysics

Orlando, Florida

FLORIDA PHILOSOPHICAL ASSOCIATION

November 2012

- with with Rebecca Kukla

Deflationism, Pragmatism and Metaphysics

Orlando, Florida

FLORIDA PHILOSOPHICAL ASSOCIATION

November 2012

Deflationism, Pragmatism and Metaphysics

University of Pittsburgh, PA

NEW SCIENCE—NEW RISKS: CENTER FOR PHILOSOPHY OF SCIENCE

March 2012

Levels of Shared Epistemic Norms

Athens, Greece

EUROPEAN PHILOSOPHY OF SCIENCE ASSOCIATION

October, 2011

Laws and Chances in Statistical Mechanics

Amsterdam, Netherlands

EUROPEAN PHILOSOPHY OF SCIENCE ASSOCIATION

October, 2009

Courses Taught

Graduate

PHILOSOPHY OF SCIENCE, PHILOSOPHY OF SPACE AND TIME; LOGICAL THEORY; MODAL LOGIC: TRUTH; SCIENCE AND SOCIAL VALUES; THE LATE WITTGENSTEIN; COMMERCIALIZATION IN BIOMEDICAL RESEARCH; WITTGENSTEIN AND USE THEORIES OF MEANING.

Undergraduate

PHILOSOPHY OF SCIENCE; PHILOSOPHY OF MIND; LOGIC; EPISTEMOLOGY; SCIENCE AND SOCIETY (UNDERSTANDING SCIENTIFIC REASONING); MINDS AND MACHINES; SCIENCE CULTURE AND SOCIETY; REVOLUTIONS IN SCIENCE; PHILOSOPHY CAPSTONE SEMINAR (“TIME IN PHILOSOPHY, LITERATURE AND FILM”).

Service

Department

USF Philosophy

UNDERGRADUATE ADVISOR; UNDERGRADUATE COMMITTEE (CHAIR); DIRECTOR OF PLACEMENT; PHILOSOPHY OF MIND SEARCH COMMITTEE (CO-CHAIR); SPECIAL COMMITTEE ON LOGIC AND CRITICAL THINKING (CHAIR); GRADUATE COMMITTEE; TENURE AND PROMOTION COMMITTEE (CHAIR).

University

USF

HONORS AND AWARDS COMMITTEE; INSTRUCTOR PROMOTIONS COMMITTEE; SPECIAL GRADE GRIEVANCE COMMITTEE.

Profession

Grant review

NSF; SSHRC (CANADA); FWF (AUSTRIA); NWO (NETHERLANDS); DFG (GERMANY); WELLCOME TRUST (UK).

Profession

Journal referee

PHILOSOPHY OF SCIENCE; BRITISH JOURNAL FOR THE PHILOSOPHY OF SCIENCE; PHILOSOPHER'S IMPRINT; ERKENNTNIS; SYNTHESE; STUDIES IN HISTORY AND PHILOSOPHY OF SCIENCE; STUDIES IN HISTORY AND PHILOSOPHY OF MODERN PHYSICS; STUDIES IN HISTORY AND PHILOSOPHY OF BIOLOGY; PERSPECTIVES ON SCIENCE; INTERNATIONAL STUDIES IN PHILOSOPHY OF SCIENCE; COGNITIVE SCIENCE; ENTROPY; KENNEDY INSTITUTE OF ETHICS JOURNAL; PHILOSOPHY OF TECHNOLOGY; PUBLIC AFFAIRS QUARTERLY; SIMULATION AND GAMING; ERASMUS JOURNAL FOR PHILOSOPHY AND ECONOMICS

Profession

Manuscript review

CAMBRIDGE UNIVERSITY PRESS; UNIVERSITY OF CHICAGO PRESS; ROUTLEDGE; PRENTICE-HALL.

Profession

Program Committees

PHILOSOPHY OF SCIENCE ASSOCIATION; MODELS AND SIMULATIONS CONFERENCES: (MS1, MS2, MS3, MS4, MS5, MS7); INCONSISTENCY ROBUSTNESS

Languages

Fluent

ENGLISH; FRENCH

Intermediate

GERMAN