

Eric B. Winsberg

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

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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

Philosophy of Science 70: 105-125

Winsberg, E.

2003

Simulations, Models, and Theories: Complex Physical Systems and their Representations

Philosophy of Science 68: S442-S454

Winsberg, E.

2001

Sanctioning Models: The Epistemology of Simulation

Science in Context 12 (3): 275-92

Winsberg, E.

1999

Encyclopedia Entries

Computer Simulation in Science

Stanford Encyclopedia of Philosophy

Winsberg, E.

2013

Computer Simulation and the Philosophy of Science

Philosophy Compass, Vol. 4

Winsberg, E.

2009

Simulation

Oxford Companion to the History of Science

Winsberg, E.

2002

Book Chapters

Uncertainty Quantification in Climate Modelling

Philosophical and Conceptual Issues in Climate Modeling, EDITED BY WINSBERG, E. AND LLOYD, E., PALGRAVE

MACMILLAN

Winsberg, E.

2018

The Metaphysical Foundations of Statistical Mechanics: on the status of PROB and PH

Time's arrow and the Probability Structure of the World, EDITED BY LOEWER, B., WINSBERG, E. AND WESLAKE, B.,

HARVARD UNIVERSITY PRESS

Winsberg, E.

2018

Success and Scientific Realism: Considerations from the Philosophy of Simulation

Routledge Handbook on Scientific Realism, EDITED BY JUHA SAATSI, ROUTLEDGE

Winsberg, E. and Mirza, A.

2017

Making an Author in Radically Collaborative Research

The Collective Dimensions of Science, EDITED BY WEISBERG, MAYO-WILSON AND BOYER, OXFORD UNIVERSITY

PRESS

Huebner, B., Kukla, R. and Winsberg, E.

2017

Deflationism, Pragmatism, and Metaphysics

Aspects of Anti-Representationalism: Truth, Expression, Normativity, and Naturalism, EDITED BY STEVEN

GROSS, NICHOLAS TEBBEN, AND MICHAEL WILLIAMS, OXFORD UNIVERSITY PRESS

Kukla, R., and Winsberg, E.

2015

A Function for Fictions: Expanding the scope of science

Fictions in Science: Philosophical Essays on Modeling and Idealization EDITED BY SUAREZ, M., ROUTLEDGE

Winsberg, E.

2009

Value Judgments and the Estimation of Uncertainty in Climate Modeling

New Waves in the Philosophy of Science, EDITED BY MAGNUS, P.D., AND BUSCH, J., PALGRAVE MACMILLAN

Biddle, J. and Winsberg, E.

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

SUMMER SCHOOL IN PHILOSOPHY OF COSMOLOGY

Gondrich, Ontario, Canada

June, 2018

Evidence in Simulation

SEVEN PINES CONFERENCE

Stillwater, Minnesota

June, 2018

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

Values and Event Attribution

PHILOSOPHY AND POLITICS OF CLIMATE CHANGE

University of Chicago

April, 2018

Model Skill

WILL SCIENCE REMAIN HUMAN

Rome, Italy

March, 2018

Probability in Weather and Climate

DEPARTMENT COLLOQUIUM

Ruhr-Universität Bochum

June 2016

Confirmation in Analog and Computer Simulation

DEPARTMENT COLLOQUIUM

Leibniz Universität Hannover

April 2016

Confirmation in Analog and Computer Simulation

INTERFERENCES|EVENTS

MECS, Universität Leuphana

January 2016

Confirmation in Analog and Computer Simulation

MODELING AND REPRESENTATION CONFERENCE

San Sebastian, Spain

December 2015

Reflections on the Relationship between Verification and Validation in Computer Simulation

WORKSHOP ON "THE ART AND SCIENCE OF SIMULATION"

Stuttgart, Germany

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."

Hannover, Germany

July 2015

Values and uncertainties in the predictions of global climate models

WORKSHOP ON "UNCERTAINTY IN CLIMATE MODELING"

Pittsburgh Center for the Philosophy of Science, PA

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

University of Pittsburgh Philosophy Department, PA

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

Geneva, Switzerland

June, 2014

How anti-realists could learn to stop worrying and love unobservables

DEPARTMENT COLLOQUIUM

University of Maryland

March, 2014

How anti-realists could learn to stop worrying and love unobservables

REDUCTION AND EMERGENCE IN SCIENCE WORKSHOP

LMU, Munich, Germany

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

LMU, Munich, Germany

July, 2013

Handshaking Your Way to the Top

MULTISCALE MODELING AND ARCHITECTURE. CENTER FOR INFORMATION TECHNOLOGY AND ARCHITECTURE

Copenhagen, Denmark

May 2013

Fuzzy Modularity

CULTURES OF ENERGY SPRING SYMPOSIUM

Rice University, Houston, TX

April 2013

Climate Uncertainty and Ambiguity Aversion

LMPS COLLOQUIUM

UC, Berkeley

March 2013

SELECTED RECENT SUBMITTED PRESENTATIONS

Robustness Rebooted

PHILOSOPHY OF SCIENCE ASSOCIATION

Seattle Washington

November 2018

A Framework for Emergent Constraints in Climate Science

BRITISH SOCIETY FOR THE PHILOSOPHY OF SCIENCE

Oxford, UK

July, 2018

Missing the Forest for the Fish: uncertainty in climate modeling

PHILOSOPHY OF SCIENCE ASSOCIATION

- with William Goodwin

Chicago, IL

November 2014

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

PHILOSOPHY OF SCIENCE ASSOCIATION

- with Radin Dardashti and Karim Thébault

Chicago, IL

November 2014

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

BRITISH SOCIETY FOR THE PHILOSOPHY OF SCIENCE

- with Radin Dardashti and Karim Thébault

Cambridge, UK

November 2014

Deflationism, Pragmatism and Metaphysics

FLORIDA PHILOSOPHICAL ASSOCIATION

- with with Rebecca Kukla

Orlando, Florida

November 2012

Deflationism, Pragmatism and Metaphysics

FLORIDA PHILOSOPHICAL ASSOCIATION

Orlando, Florida

November 2012

Deflationism, Pragmatism and Metaphysics

NEW SCIENCE—NEW RISKS: CENTER FOR PHILOSOPHY OF SCIENCE

University of Pittsburgh, PA

March 2012

Levels of Shared Epistemic Norms

EUROPEAN PHILOSOPHY OF SCIENCE ASSOCIATION

Athens, Greece

October, 2011

Laws and Chances in Statistical Mechanics

EUROPEAN PHILOSOPHY OF SCIENCE ASSOCIATION

Amsterdam, Netherlands

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