

PSA 2008 is the 21st Biennial Meeting of the Philosophy of Science Association. The very first PSA Biennial Meeting was held here, in Pittsburgh, forty years ago in 1968.

This was not, of course, the first meeting of the PSA, which met annually in December under the auspices of Section L of the American Association for the Advancement of Science from 1946 through 1961. But it is in its present form, as a biennial meeting (typically held in conjunction with meetings of the History of Science Society, the Society for the History of Technology, or the Society for the Social Study of Science) that several generations of philosophers of science have come to know the PSA as an intellectual home. The PSA and its members thus owe a debt of gratitude to Adolf Grunbaum, under whose Presidency the biennial meetings were initiated, and whose foresight and leadership led to forty years of meetings that shaped the philosophy of science.

The program from the first PSA Biennial Meeting has been reproduced in the following pages (from an original graciously provided by Adolf Grunbaum), both to commemorate this fortieth anniversary of the first PSA biennial meeting and to present an item of historical interest to this year's attendees.

*Gary Hardcastle
Executive Secretary and Treasurer,
Philosophy of Science Association*

Philosophy of Science Association

1968 Biennial Meeting

October 11-13, 1968

WEBSTER - HALL HOTEL
4415 FIFTH AVENUE
PITTSBURGH, PA. 15213

REGISTRATION: Everyone is requested to register. (No fee is charged)

(All sessions and activities, except Saturday's cocktail and buffet hour, will be held in the parlors of the University Room on the second floor of the Webster Hall Hotel.)

Friday, October 11, 1968

MORNING CONCURRENT SESSIONS

9:30 A.M. Symposium: **Philosophical Implications of Computer Science.** Parlor D

Kenneth Sayre, University of Notre Dame
"Information Processing and Mind-Body Identity"

Keith Gunderson, University of Minnesota
"Philosophy and Computer Simulation"

Herbert Bohnert, Michigan State University, Commentator

Chairman: Alan Ross Anderson

9:30 A.M. Contributed Papers: **Philosophy of Physics.** Parlors A-B

9:30—Jeffery Bub, University of Minnesota
"Hidden Variables and the Copenhagen Interpretation — A Reconciliation"

10:20 Enos E. Witmer, University of Pennsylvania
"Interpretation of Quantum Mechanics and the Future of Physics"

11:10 Paul Fitzgerald, University of Pennsylvania
"The Relativity of Time and Truth"

Chairman: Aage Peterson

AFTERNOON CONCURRENT SESSIONS

2:30 P.M. Contributed Papers: **Reduction and Operationism**. Parlors A-B

2:30 Fred Wilson, University of Toronto
"In Defence of the Operationist Maxim"

3:20 Clark Glymour, Indiana University
"Reduction in the Physical Sciences"

4:10 Robert L. Causey, University of Texas
"Some Complications Involved in the Unification of Science"

Chairman: Morton L. Schagrin

2:30 P.M. Contributed Papers: **Confirmation**. Parlor D

2:30 Ronald N. Giere, Indiana University
"Bayesian Statistics and Biased Procedures"

3:20 Vincent E. Smith, Sarah Lawrence College
"Logic and a World Without Ravens"

4:10 Mary B. Hesse, University of Cambridge
"The Interanimation of Theories"

Chairman: Wilfrid Sellars

2:30 P.M. Contributed Papers: **Philosophy of Biological and Social Sciences**. Parlor C

2:30 Ian C. Jarvie, York University
"Ethics and the Participant Observer"

3:20 Laird Addis, University of Iowa
"On the Reduction of Sociology to Psychology"

4:10 Michael Ruse, University of Guelph
"Natural Selection"

Chairman: Sidney Morgenbesser

8:30 P.M. **Welcoming Remarks and Business Meeting**. Parlors A-B-C

Welcome: Chancellor, University of Pittsburgh

Business Meeting:

Adolf Grünbaum, President

Wesley C. Salmon, Vice-President

Gerald J. Massey, Secretary-Treasurer

9:00 P.M. **Smoker**. Parlors A-B-C

(No charge for members of the Philosophy of Science Association)

Saturday, October 12, 1968

MORNING CONCURRENT SESSIONS

9:30 A.M. Symposium: **Philosophy of Biology**. Parlor D

Edward Manier, University of Notre Dame
"Experimental Method in Biology: T. H. Morgan and the Theory of the Gene"

David Hull, University of Wisconsin — Milwaukee
"What Philosophy of Biology is Not"

Hugh Lehman, Iowa State University, Commentator

Chairman: Carl G. Hempel

9:30 A.M. Contributed Papers: **Models and Correspondence Rules**. Parlors A-B

9:30 Henry C. Byerly, University of Arizona
"Model Structures and Model Objects"

10:20 Kenneth Schaffner, University of Chicago
"Correspondence Rules"

11:10 Gen-ichiro Nagasaka, Nanzan University
"Models in Physics"

Chairman: John Tucker

AFTERNOON CONCURRENT SESSIONS

2:30 P.M. Symposium: **The Logic of Quantum Mechanics.** Parlor D

Bas C. van Fraassen, Yale University and Indiana University
"The Labyrinth of Quantum Logics"

Hilary Putnam, Harvard University
"How to Think Quantum-logically"

George Farre, Georgetown University
"Reflections on the Significance of a Quantum Logic"

Chairman: Josef M. Jauch

2:30 P.M. Contributed Papers: **Explanation and Falsifiability.** Parlors A-B

2:30 Nicholas Rescher, University of Pittsburgh
"Lawfulness as Imputation"

3:20 Joseph Hanna, Michigan State University
"Falsifiability, Simplicity, and Free Parameters"

4:10 Joseph Agassi, Boston University
"Positive Evidence in Pure and Applied Science"

Chairman: Roger C. Buck

2:30 P.M. Contributed Papers: **Science and Value.** Parlor C

2:30 Lawrence A. Boland, Simon Fraser University
"Conventionalism and Economic Theory"

3:20 Ian I. Mitroff, University of Pittsburgh
"The Mythology of Methodology: Prelude to a Hip Science"

4:10 Werner Leinfellner, University of Nebraska
"The Operational Structure of Spaces with Special Reference to Value-Spaces"

Chairman: Peter Caws

5:00-7:00 P.M. **Cocktail and Light Buffet Hour.**

The Chancellor's Suite, 1201 Bruce Hall, University of Pittsburgh. (Within walking distance of the Webster Hall Hotel). Co-sponsored by the Center for Philosophy of Science of the University of Pittsburgh.

Sunday, October 13, 1968

10:00 A.M. **Invited Addresses.** Parlor D

10:00 Rom Harré, Oxford University
"Qualities and Powers"

11:15 Henryk Mehlberg, University of Chicago
"Indeterministic Causality"

Chairman: Richard S. Rudner

12:30 P.M. **Adjournment**

PSA Acknowledgments

Having come aboard as the Executive Secretary of the Philosophy of Science Association in January, 2008, well after PSA2008's foundation was laid, I must acknowledge not just the many who have helped me come up to speed in the past ten months but also those whose work has in fact produced this 21st biennial meeting of the PSA. George Gale, my predecessor, and Jay Malone, Executive Director of the History of Science Society, fall into both categories. George's perceptive advice, institutional memory, and good nature rendered the task of assuming his responsibilities far easier than it would have been (or is?) in every George-less possible world. Jay is the motive force behind PSA2008, and its success is a direct result of his matchless knowledge, experience, dedication, and good sense. Jay would be the first to note that he relies on an outstanding staff at the HSS/PSA Business Office; I've profited from the help and expertise of Virginia Hessels and Michal Meyer especially.

Amid his many other responsibilities, Alan Richardson chaired the PSA 2008 Program Committee. Alan assembled an outstanding program committee and produced the exceptional program you hold, sacrificing in the process neither his Kantianism nor his sense of humor. Jim Bogen chaired the Local Arrangements Committee, easing worries I'd otherwise have that PSA2008 attendees might not be properly apprised of Pittsburgh's many wonders. Generous financial contributions from the Center for Philosophy of Science and the Department of the History and Philosophy of Science at the University of Pittsburgh, and most especially by the Department of Philosophy at the University of Michigan, supported the PSA Presidential Reception. And with characteristic graciousness, Adolf Grunbaum insured that the PSA's fascinating and proud history not go unrecognized. Finally, my deepest thanks are reserved for the members of the PSA. They make this meeting come alive, and they make the Philosophy of Science Association worth the work. Thanks everyone!

Gary Hardcastle
PSA Executive Secretary and Treasurer

I would like to thank Larry Sklar and members of the Governing Board of PSA for the opportunity to serve as Program Chair, as well as the members of the program committee, all of whom have done a wonderful job and must be absolved from any problems that have arisen. Throughout the process I have depended upon Michael Dickson, without whom the whole enterprise would have been impossible; at a crucial moment, when all Web sites seemed lost, Erik Curiel saved the day. I learned the basics of the position from an extensive set of notes sent to me by Miriam Solomon and received much aid and a bit of comfort from Gary Hardcastle. I was ably aided throughout by my University of British Columbia research assistants, Yuichi Amitani, Alirio Rosales, and Roger Stanev. The most important factor in the creation of the program was, of course, the excellent set of papers and proposals the program committee received.

Alan Richardson
PSA2008 Program Committee Chair

PSA 2008 Program



All PSA sessions will be held on the Conference Floor (see map on page 19). The opening night reception, along with the Friday night joint reception, and the graduate student party will be held on the 17th floor Grand Ballroom. The Presidential address will be in the William Penn Ballroom on the William Penn floor.

ROOM KEY

Conference floor

PHIP – Phipps
CIII – Carnegie III
VAND – Vandergrift
CCA – Conf. Center A
CCB – Conf. Center B
CCC – Conf. Center C
OLIV – Oliver
PARKE – Parkview East

17th floor

GB – Grand Ballroom

William Penn floor

WPB – William Penn Ballroom

Thursday, 12:30-4:00 p.m.

**PSA Governing Board Meeting,
Parkview East**

Thursday, 2:00-4:00 p.m.

PHIP – Workshop: Anomaly in Contemporary Philosophy of Science

Participants: Kevin Elliott (South Carolina), Will Bridewell (Stanford),

Lindley Darden (Maryland), Robert Rose (Indiana), Jutta Schickore (Indiana)
Kevin Elliott (South Carolina),
Chair

CCA – Symposium: The New Biological Essentialism

John Dupré (Exeter), Chair
**Species Have (Partly) Intrinsic Es-
sences**

Michael Devitt (CUNY, Graduate Center)

Biological Essentialism in Modern Systematics

Olivier Rieppel (The Field Museum)
**Homeostatic Property Clusters and
Higher Taxa: Rethinking Natural
Kinds and Monophyly**

Richard Boyd (Cornell)

What Wrong with the New Biologi- cal Essentialism

Marc Ereshefsky (Calgary)

CIII – Symposium: The Janus Face of Symmetry

Katherine Brading (Notre Dame),
Chair

A Tale of Two Symmetries

Richard Healey (Arizona)

Think Locally, Act Globally: On the Empirical Significance of 'Local' Symmetries

Hilary Greaves (Rutgers/Oxford)

Faraday's Cage; Einstein's Lift; Galileo's Black Hole

David Wallace (Oxford)

Thursday, 2:00-4:00 p.m.

VAND – Symposium: New Models of the Social Structure of Science, Part One – New Models of Cognitive Labor

Miriam Solomon (Temple), Chair
Parameter Estimation and Social Structure: A Study in Social Epistemology

Kevin Zollman (CMU)

Attending to the Real Rules of the Game: Honest Cognitive Labor Meets Mimetic Behavior in Science

Janet Stemwedel (San Jose State)

Secrecy and Sharing in Science: Resolving the Tension

Michael Strevens (NYU)

Value and Significance on Epistemic Landscapes

Michael Weisberg (Penn)

Epistemic Diversity and Epistemic Landscapes

Ryan Muldoon (Penn)

CCC – Contributed Papers: Cognitive Science 1

Ken Aizawa (Centennial College of Louisiana), Chair

Normative Man in Dual Process Theories

Annika Wallin, Johannes Persson,
Nils-Eric Sahlin (Lund)

Causation and Awareness of Agency

Holly Andersen (Pittsburgh)

Is It Possible to Measure Happiness? The Measurement-Theoretic vs. the Psychometric Approach to Measurement

Erik Angner (Alabama—Birmingham)

Is Core Affect a Natural Kind?

Andrea Scarantino (Georgia State)

CCB – Contributed Papers: (Anti)Realism and the Success of Science

John Koolage (UBC), Chair

The Limits of Scientific Explanation and the No-Miracles Argument

Greg Frost-Arnold (Nevada-Las Vegas)

Explaining Past Successes in Virtue and Despite Particular Theoretical Commitments

David Harker (East Tennessee State)

Dynamics of Reason and the Kantian Project

Maarten van Dyck (Ghent)

Whatever Happened to Scientific Antirealism?

Bence Nanay (Syracuse)

OLIV – Contributed Papers: Epistemology and Representation

Davis Baird (South Carolina),
Chair

Scientific Reasoning is Material Inference: Combining Confirmation, Discovery, and Explanation

Ingo Brigandt (Alberta)

Decoupling the Model-Target Dyad: The Thesis of Indirect Representation and Reverse Reasoning

Tarja Knuuttila (Helsinki)

Scientific Models or Logical Models: A False Dilemma for the Semantic View

Soazig Le Bihan (Illinois Institute of Technology)

Thursday, 4:30-6:45 p.m.

CCA – Symposium: Pragmatism at the Interface of Science and Politics

Gary Hardcastle (Bloomsburg),
Chair

Progressivism, Pragmatism, and Science: John Dewey's Theory of Science

Don Howard (Notre Dame)

A Neglected Pragmatist Alternative? Edgar Singer, C. West Churchman, Russell Ackoff and 'American Experimentalism'

Alan Richardson (UBC)

Scientific Significance and Genuine Problems: Fundamental Troubles in Kitcher's Social Theory of Science

Matthew J. Brown (UCSD)

'Science is Not a Quest for Certainty': On James B. Conant's Pragmatic Theory of Science

Justin Biddle (Bielefeld)

VAND – Symposium: (Mis)Representing Mathematical Models in Biology

Todd Grantham (College of Charleston), Chair

The Meaning of Models in Ecology and Evolutionary Biology

Joan Roughgarden (Stanford)

What Models in Evolutionary Biology Don't Mean

James R. Griesemer (UC, Davis)

On Some Explanatory Dilemmas Raised by Construing Evolutionary Populations as Mere Ensembles

Frédéric Bouchard (Montréal)

(Mis)interpreting Mathematical Models of Drift: Drift as a Physical Process

Roberta Millstein (UC, Davis),
Robert A. Skipper, Jr. (Cincinnati),
and Michael R. Dietrich (Dartmouth)

CCB – Symposium: Neural Computation

Peter Machamer (Pittsburgh),
Chair

Thought Experiments in Vivo

Carl Craver (Washington University)

The Resilience of Computationalism

Gualtiero Piccinini (Missouri – St. Louis)

Computation, UCSD Style

Oron Shagrir (Hebrew University)

Learning and Its Representation

Jacqueline A. Sullivan (Alabama – Birmingham)

PHIP – Symposium: New Models of the Social Structure of Science, Part Two – The Social Science of the Structure of Science (A Workshop)

Miriam Solomon (Temple), discussant

Michael Weisberg (Penn), Chair

Navigating the Terrain of Knowledge

Frank Keil (Yale)

Some Problems in the Division of Research Labor

Elihu M. Gerson (Tremont Research Institute)

Cultural Transmission and Scientific Progress

Thomas L. Griffiths (Berkeley)

Thursday, 4:30-6:45 p.m.

**CCC – Contributed Papers:
Philosophy of Biology 1**

Christophe Haufe (Virginia Tech),
Chair

**Are Bio-Molecular Networks
Emergent?**

Christophe Malaterre (Sorbonne)

**Generalization and Discovery By
Assuming Conserved Mechanism**
William Bechtel (UCSD)

**An Organizational Account for
Functional Attributions in Biological
Systems**

Matteo Mossio (CNRS, Paris),
Cristian Saborido (University of
the Basque Country), and Alvaro
Moreno (University of the Basque
Country)

**The Structure of Idealization in Bio-
logical Theories**

Xavier de Donato (Universidad
Autónoma Metropolitana de Iztapa-
lapa) and Alfonso Arroyo-Santos
(UNAM)

**OLIV – Contributed Papers:
Philosophy of Physics 1**

Laura Ruetsche (Michigan), Chair

**Typicality and the Approach to Equi-
librium in Boltzmannian Statistical
Mechanics**

Roman Frigg (LSE)

**Technical and Conceptual Problems
with Gibbs Canonical Distribution**

Kevin Davey (Chicago)

**On the Conflicting Assessments of
the Current Status of String Theory**

Richard Dawid (Vienna)

**Anthropic Reasoning in Multiverse
Cosmology and String Theory**

Steve Weinstein (Waterloo)

**CIII – Contributed Papers:
Laws, Counterfactuals,
Explanation**

Harvey Siegel (Miami), Chair
**Inference to the Best Explanation:
Virtues, Causes and Contrasts**

Kareem Khalifa (Middlebury)

**Varieties of Modularity for Causal
and Constitutive Explanations**

Jaakko Kuorikoski (Helsinki)

**Counterfactuals, Thought Experi-
ments and Singular Causal Analysis
in History**

Julian Reiss (Erasmus)

**Fundamental Laws and Counterfac-
tual Stability**

Patrick McGivern (Alberta)

Thursday, 7:30-8:30 p.m.

**Joint PSA/HSS Reception. Welcome
by University of Pittsburgh Provost,
James Maher; introduction by Adolf
Grunbaum, Grand Ballroom**

Friday, 7:45-8:45 a.m.

Philosophy of Science Editorial Board
Meeting, Conf. floor, Carnegie III

Friday, 9:00-11:45 a.m.

**CCA – Workshop: Questioning
the Tree of Life, Part One**

Richard Burian (Virginia Tech), Chair
Introduction of topic

Maureen O'Malley (Exeter)

**Endosymbiosis, the Tree of Life, and
Genomes (the Good, the Bad, and
the Ugly in Evolution)**

Bill Martin (Düsseldorf)

**An Alternative to Species or Gene
Trees: Process Phylogeny**

Eric Baptiste (UMPC, Paris)

The Variation of Evolutionary Processes across Microbial Diversity

Yan Boucher (MIT)

Order Out of Chaos

Jeff Lawrence (Pittsburgh)

Do Charismatic Eukaryotes Live in Trees?

John Dupré (Exeter)

How the Microbial World Ruins Everything

Rob Wilson (Alberta)

Microbiology and the Species Problem

Marc Ereshefsky (Calgary)

Organisms and Parenthood

Laura Franklin (Columbia)

Concluding Reflections on the Tree of Life

Elliott Sober (Wisconsin)

PHIP – Symposium: Phenomena, Data, and Patterns

James Robert Brown (Toronto), Chair

Signal, Noise, and Information in Imperfect Knowledge

Paul Teller (UC, Davis)

Noise in the World

James Bogen (Pittsburgh)

The Ontology of Patterns in Empirical Data

James W. McAllister (Leiden)

Data, Phenomena, Signal, and Noise

James F. Woodward (Caltech)

Autonomous Patterns and the Objects of Physics

Katherine Brading (Notre Dame)

VAND – Symposium: Analyzing Climate Science

Chris Stephens (UBC), Chair

Confirmation of Climate Models

Elisabeth Lloyd (Indiana)

Many Models, Many Simulations: Using Ensembles to Predict Climate Change

Wendy Parker (Ohio)

Quantification of Uncertainties of Future Climate

Linda O. Mearns (National Center for Atmospheric Research)

Adaptation to Global Warming: Do Climate Models Tell Us What We Need to Know?

Naomi Oreskes (UCSD)

CCB – Symposium: Algebraic Quantum Field Theory: Locality, Causality and Correlations between Space-like Separated Systems

John Earman (Pittsburgh), Chair

On Space-like Correlations in Quantum Field Theory

Jeremy Butterfield (Cambridge)

On the Persistence of Entanglement in Relativistic Quantum Field Theory

Giovanni Valente (Maryland)

Subsystems and Independence in Microscopic Relativistic Physics

Stephen J. Summers (Florida)

Operational Independence in Quantum Field Theory

Miklos Redei (LSE)

OLIV – Contributed Papers: Philosophy of Cognitive Science 2

Lawrence Shapiro (Wisconsin), Chair

Is Phenomenal Consciousness a Problem for the Brain Sciences?

Justin M. Sytsma (Pittsburgh)

Prospects for Naturalizing Color or ‘What’s Blue and Yellow and Green All Over?’

Alistair Isaac (Stanford)

Brain-mind and Structure-function Relationships: A Methodological Response to Coltheart

Adina Roskies (Dartmouth)

Realization, Determinations, and Mechanisms: Rethinking the Mental-Physical Relation

Matthew Haug (William and Mary)

Friday, 9:00-11:45 a.m.

CCC – Contributed Papers: Inference, Abduction, Trials

David Danks (CMU), Chair
Abduction, Tomography, and Other Inverse Problems

Ilkka Niiniluoto (Helsinki)

Common Cause Abduction and the Formation of Theoretical Concepts

Gerhard Schurz (Düsseldorf)

Double-Blinding: The Benefits and Risks of Being in the Dark

Jeremy Howick (LSE)

Evidence and Experimental Design in Sequential Trials

Jan Sprenger (Tilburg)

CIII – Contributed Papers: History of Philosophy of Science

Eric Palmer (Allegheny), Chair
Qualities, Properties and Laws in Newton's Deduction

David M. Miller (Yale)

Kant and the Prohibition of Armchair Cosmology

Matt Hettche (Auburn)

'Bold Leaps': Guesses of Inferences? Herschel and Analogy in Scientific Reasoning

Laura J. Snyder (St. John's)

Michael Faraday's *Historical Sketch of Electromagnetism* and the Theory-Dependence of Experimentation

Aaron Cobb (St. Louis)

Friday, 12:00-1:15 p.m.

CCB – Lunchtime Discussion: Philosophy of Science in the Public Domain, Bending Science: Legal, Historical, and Philosophical Concerns

Sandra Mitchell (Pittsburgh), Chair

Speakers: Wendy Wagner (Case Western), Naomi Oreskes (UCSD), and Nancy Cartwright (LSE)

Friday, 1:30-3:10 p.m.

CCA – Workshop: Questioning the Tree of Life, Part Two

Discussion featuring all involved in Questioning the Tree of Life, Part One

VAND – Symposium: Evidence, Uncertainty, and Risk: Challenges of Climate Science

Naomi Oreskes (UCSD), Chair
What Climate Scientists Can Learn from Epidemiologists

Kristin Shrader-Frechette (University of Notre Dame)

How to Represent, and Act in Contexts of, Deep Uncertainty
Sandra Mitchell (University of Pittsburgh)

Disagreement, Action, and Climate Change

Dale Jamieson (New York University)

PHIP – Symposium: Author Meets Critics: *J. McKenzie Alexander's The Structural Evolution of Morality*

Daniel Steel (Michigan State), Chair

The Evolution of Norms of Community Standing

Peter Vanderschraaf (Boston) and Sarah Taylor

Fairness Norms or Focal Points?

Ken Binmore (LSE)

Hobbes' Missing Link

Brian Skyrms (UC, Irvine)

Response to Critics

Cristina Bicchieri (Penn)

Reply to Critics

J. McKenzie Alexander (LSE)

OLIV – Symposium: Collective Knowing in Science

Elihu Gerson (Tremont Research Institute), Chair

Passive Consensus and Active Commitments in the Sciences

Alban Bouvier (Ecole Normale Supérieure)

Epistemic Responsibility in Science: Individual and Collective

Kristina Rolin (Helsinki School of Economics)

Scientific Specialties and the Production of Knowledge

K. Brad Wray (Cornell)

CCB – Contributed Papers: Philosophy of Biology 2

Rasmus Winther (UC, Santa Cruz), Chair

Natural Selection as a Cause:

Probability, Chance, and Selective Biases

Francoise Longy (IHPST, Paris)

The Unity of Fitness

Marshall Abrams (Alabama – Birmingham)

Newtonian Forces and Evolutionary Biology: A Problem and Solution for Extending the Force Interpretation

Joshua Filler (Wisconsin)

Thermodynamics, Evolution, and the Contingency Thesis: Dissolving the Biology Problem

Andrew Hamilton (Arizona State)

CCC – Contributed Papers: Philosophy of Physics 2

Roman Frigg (LSE), Chair

Actual and Virtual Events in the Quantum Domain

Fred Kronz (Texas)

Probability, Self-Location, and Quantum Branching

Peter Lewis (Miami)

Quantum Field Theories in Classical Spacetimes and Particles

Jonathan Bain (Polytechnic Institute of NYU)

Why Other Branches are Unobservable in the Everett Interpretation

Arthur Cunningham (Pittsburgh)

CIII – Contributed Papers: Epistemology and Semantics

Horacio Arló Costa (CMU), Chair

Jeffrey Conditioning and External Bayesianity

Carl Wagner (Tennessee)

Robustness, Discordance, and Relevance

Jacob Stegenga (UCSD)

The Problem of Noncounterfactual Conditionals

David Etlin (MIT)

Would-Cause Semantics

Phil Dowe (Queensland)

Friday, 3:30-5:30 p.m.

CCA – Symposium: Values in Science, Norms in Context

Janet Kourany (Notre Dame), Chair
Drawing Lessons from DES: Cognitive, Social, and Ethical Values in their Proper Roles

Heather Douglas (Tennessee)

The Value Valence of ADHD Science

Susan Hawthorne (Minnesota)

The Relationship of Ignorance and Value in Functional Analyses of Menstruation

Maira Howes (Trent)

Social Values and Evidentiary Standards: The Case of the HPV Vaccine

Kristen Intemann (Montana State) and Inmaculada de Melo-Martín (Cornell)

VAND – Symposium: Author Meets Critics: Samir Okasha's *Evolution and the Levels of Selection*

Joel Velasco (Stanford), Chair

The Averaging Argument and the Definition of Group in Multi-Level Selection Theory

Elliott Sober (Wisconsin)

The Plurality of Formal Approaches Analyzed in Okasha's *Evolution and the Levels of Selection*

C. Kenneth Waters (Minnesota)

Reply to Critics

Samir Okasha (Bristol)

CCC – Symposium: Thermodynamics in Chemistry

Robert Batterman (Western Ontario), Chair

Thermodynamics in the Physical Chemistry of Wilhelm Ostwald

Robert Deltete (Seattle)

A Mereological Interpretation of the

Phase Rule

Paul Needham (Stockholm)

Entropy and Chemical Substance

Robin Findlay Hendry (Durham)

Thermodynamics and Chemistry:

How Does a Theory Formulated without Reference to Matter Explain the Properties of Matter?

G. Krishna Vemulapalli (Arizona)

OLIV –Contributed Papers: Philosophy of Biology 3

Marcel Weber (Basel), Chair

What Does It Mean to be 75%

Pumpkin? The Units of Comparative Genomics

Monika Piotrowska (Utah)

Interactive Predispositions

James Tabery (Utah)

Conservative and Nonconservative Models in Molecular Biology and the Concept of Genetic Information

Ulrich Krohs (Hamburg)

Genetic Causation and Actual Difference Makers

Robert Northcutt (Missouri – St. Louis)

CCB – Contributed Papers: Holism and (In)Determinism in Physics and Elsewhere

Gordon Belot (Pittsburgh), Chair

A New Look at Relational Holism in Quantum Mechanics

Matteo Morganti (CNRS, Paris)

Ontological Import of Relational Quantum Mechanics

Juan Ferret (Texas, El Paso)

The Norton-type Lipschitz-Indeterministic Systems and Elastic Phenomena

Alexandre Korolev (UBC)

Is Determinism More Favorable than Indeterminism for the Causal Markov Condition

Isabelle Drouet (CNRS, Paris)

**PHIP – Contributed Papers:
Philosophy of Cognitive
Science 3**

Gary Hatfield (Pennsylvania),
Chair

**A Consumer-Based Teleoseman-
tics for Animal Signals**

Ulrich Stegmann (Bristol)

**Complex First? On the Evolution-
ary and Developmental Priority of
Semantically Thick Words**

Markus Werning (Düsseldorf)

**The Evolution of Co-operative
Behavior and Its Implications for
Ethics**

Stephen Morris (Western Missouri)
**Simulation, Simplicity, and Selec-
tion: An Evolutionary Perspective
on Human Mindreading**

Armin Schulz (Wisconsin)

**CIII – Contributed Papers:
Values, Phenomena; Dis-
covery, Pursuit**

Evelyn Brister (Rochester Institute
of Technology), Chair

**Holism and Entrenchment in Cli-
mate Model Validation**

Johannes Lenhard (Bielefeld) &
Eric Winsberg (South Florida)

**On the Locality of Data and
Claims about Phenomena**

Sabine Leonelli (LSE)

**How Values in Scientific Dis-
covery and Pursuit Alter Theory
Appraisal**

Kevin Elliott (South Carolina)
and Daniel McKaughan (Boston
College)

**Why Discovery Matters: Values All
the Way Down**

Lisa Gannett (St. Mary's)

Friday, 5:30-6:30 p.m.

Carnap Edition Reception, 17th
floor, in hallway near Urban

Friday, 6:00-7:30 p.m.

Joint PSA/HSS Reception, 17th
floor, Grand Ballroom

Friday, 9:30-11:00 p.m.

HSS/PSA Graduate Student Party
Co-sponsored by GECC
17th floor, Grand Ballroom

Saturday, 7:45-8:45 a.m.

PSA Women's Caucus Breakfast,
Conf. floor, Oliver

Saturday, 9:00-11:45 a.m.

**CCB – Symposium: Induc-
tion without Rules**

Fred Kronz (Texas), Chair

**There are No Universal Rules for
Induction**

John D. Norton (Pittsburgh)

The War on Induction

Peter Achinstein (Johns Hopkins)

**Hume and Induction without
Rules**

Thomas Kelly (Princeton)

**Evidence and General Rules: A
Response to Achinstein, Norton,
and Kelly**

John Worrall (LSE)

PSA

PSA Fri. - Sat.

Saturday, 9:00-11:45 a.m.

PHIP – Symposium: Extrapolation and Public Policy

Marcel Weber (Basel), Commentator
Kristen Schrader-Frechette (Notre Dame), Chair

Bayes Nets and Nanotech: A Chain Graph Framework for Extrapolation

Daniel Steel & Karen Chou
(Michigan State)

Extrapolation without Process Tracing

Francesco Guala (Exeter/San Raffaele)

Comparative Process Tracing and Climate Change ‘Fingerprints’

Wendy Parker (Ohio)

CCA – Symposium: Applied Mathematics and Philosophy of Science

Paul Teller (UC, Davis), Chair

The Value of Mathematics for Scientific Confirmation

Christopher Pincock (Purdue)

Essential Models and Explanatory Mathematics

Robert Batterman (Western Ontario)

What if There are No Mathematical Entities? Lessons for Scientific Realism

Stathis Psillos (Athens)

Leibniz’ ‘Possibilities’ and Our Own

Mark Wilson (Pittsburgh)

CCC – Contributed Papers: Philosophy of Biology 4

Anya Plutynski (Utah), Chair

Are there Laws of Biology? A Reply to John Beatty

Gregory Morgan (Spring Hill)

The Paradox of Stasis and the Nature of Explanations in Evolutionary Theory

Jonathan Kaplan (Oregon State)

The Frequency Hypothesis and Evolutionary Arguments

Yuichi Amitani (UBC)

Prediction in Selectionist Evolutionary Theory

Rasmus Winther (UC, Santa Cruz)
& Fermin Fulda (UNAM)

OLIV – Contributed Papers: Reduction and Causation

Paul Bartha (UBC), Chair

Physicalism and the Whole-Part Relation

Andreas Huettelman (Münster)

Intervention, Determinism, and the Causal Minimality Condition

Jiji Zhang (Lingnan University and Caltech) & Peter Spirtes (CMU)

Functional Stability and Systems Level Causation

Gry Oftedal & Anders Strand (Oslo)

Screening Off, Measurement, and Causal Inference

Richard Scheines & Stephen
Fransali (CMU)

VAND – Contributed Papers: The Social in Science and Philosophy of Science

Margaret Schabas (UBC), Chair

Two Concepts of Social Situatedness in Science

Warren Schmaus (Illinois Institute of Technology)

Conflicting Expert Testimony and the Search for Gravity Waves

Benjamin Almassi (Washington)

Philosophy of Science in the Public Interest: Useful Knowledge and the Common Good

Rose-Mary Sargent (Merrimack)

Advocates or Unencumbered Selves? On the Role of Mill’s

Political Liberalism in Longino’s Contextual Empiricism

Justin Biddle (Bielefeld)

CIII – Contributed Papers: Kinds and Ontologies

Hasok Chang (University College
London), Chair

How to Fix Kind Membership: A Problem for HPC Theory and a Solution

Thomas Reydon (Hannover)

Are Stellar Kinds Natural Kinds? A Challenging Newcomer in the Monism/Pluralism and Realism/ Antirealism Debate

Stephanie Ruphy (Provence)

Against Pluralistic and Inexact Ontologies

Nicholaos Jones (Alabama, Hunts-
ville)

Macromolecular Pluralism

Matthew Slater (Idaho)

Saturday, 12:00-1:15 p.m.

Philosophy of Science **Search and
Selection Committee Meeting,
Heinz**

Saturday, 1:30-3:45 p.m.

CCA – Workshop: How Can Philosophers of Science Take Up More Socially Relevant Roles?

Discussants: Heather Douglas
(Tennessee), John Dupré (Exeter),
Lisa Gannett (St. Mary's), Don
Howard (Notre Dame), Kristin
Shrader-Frechette (Notre Dame),
Nancy Tuana (Penn State)
Chair/Moderator: Sophia Efsta-
thiou (USCD/LSE)
Organizer: Kathryn Plaisance
(Hannover)

VAND – Symposium: Evo- lutionary Theory as a Theory of Forces

John Beatty (UBC), Chair

A Non-Newtonian Newtonian Model of Evolutionary Theory: The View from ZFEL

Robert Brandon (Duke)

Forces and Causes in Evolution- ary Theory

Christopher Stephens (UBC)

Not a Sure Thing: Fitness and Causation

Denis Walsh (Toronto)

CCB – Symposium: New Perspectives on the Problem of Old Evidence

Peter Achinstein (Johns Hopkins),
Chair

Content and Confusion in Bayes- ian Epistemology

Clark Glymour (CMU)

The Old Evidence Problem: An Opinionated, Historical Survey

Brandon Fitelson (Berkeley)

The Probative Value of Old Evi- dence

James Joyce (Michigan)

Knowledge, “Expectedness,” and the Problem(s) of Old Evidence

Gabriele Contessa (Carleton)

Saturday, 1:30-3:45 p.m.

**CCC – Contributed Papers:
Philosophy of Biology 5**

James G. Lennox (Pittsburgh), Chair

Population in Population Biology

Peter Gildenhuys (Pittsburgh)

**Ecological Explanation between
Manipulation and Mechanism**

Viorel Paslaru (Dayton and Institute
of Philosophy, Romanian Academy)

**Sewall Wright and Gustave Malecot
on Isolation by Distance**

Yoichi Ishida (Pittsburgh)

**OLIV – Contributed Papers:
Philosophy of Physics 3**

Carl Hoefer (Barcelona), Chair

**What is a ‘Time Machine’ in Gen-
eral Relativity?**

John Manchak (UC, Irvine)

**Challenging the Spacetime Struc-
turalist**

Christian Wuthrich (UCSD)

Points and Permutations

Benjamin Janzen (CMU)

**General Relativity Requires No
Interpretation**

Erik Curiel (Pittsburgh)

**PHIP – Contributed Papers:
Concept Formation, Rep-
resentation, and Fruitful-
ness**

Darren Bradley (UBC), Chair

**How Do Structural Formulas
Embody the Theory of Organic
Chemistry**

William Goodwin (Swarthmore)

**Mathematical Methods and Fruit-
fulness**

Audrey Yap (Victoria)

Definitions and Scientific Concepts

Corinne Bloch (Tel Aviv)

Concepts as Tools in the Experi-

**mental Generation of Knowledge in
Cognitive Neuropsychology**

Uljana Feest (Technische Universität
Berlin)

**CIII – Contributed Papers:
Psychiatry and Human
Kinds**

Mark Risjord (Emory), Chair

**Syndrome Stabilization in Psychia-
try: Pathological Gambling as a
Case Study**

Don Ross (Alabama – Birmingham
and Cape Town)

**Psychiatric Kinds, Looping Effects,
and Stable Targets: Are Any Mental
Disorders Natural Kinds?**

Jonathan Tsou (UBC)

**Why Human Kinds are Different: In
Defense of Hacking**

Michael Maleki (Calgary)

**Are All Interactive Kinds Human
Kinds?**

Muhammad Khalidi (York)

Saturday, 4:30-6:00 p.m.

**Announcement of PSA Essay Prize
Winner, William Penn floor, William
Penn Ballroom**

**Philosophy of Science Association
Presidential Address, William Penn
floor, William Penn Ballroom**

Saturday, 6:30-8:00 p.m.

**Philosophy of Science Association
Presidential Reception, Regional
Enterprise Tower (Old Alcoa Build-
ing next to the Omni William Penn)**

Governing Board and Program Committee of the Philosophy of Science Association



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Twenty-First Biennial Meeting:

The program committee for PSA 2008, chaired by Alan Richardson (University of British Columbia), is as follows:

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