

Program*

Friday, October 19

Biology: The Non-Propositional Side

PSA Symposium

- Chair: John Beatty, University of Minnesota
- Speakers: Michael Ruse, University of Guelph
James R. Griesemer, University of California—Davis
Peter J. Taylor, University of California—Berkeley
William Wimsatt, University of Chicago

Recent Work on State Vector Reduction

PSA Symposium

- Chair: Daniel Greenberger, City College of New York
- Speakers: Philip Pearle, Hamilton College
Gian-Carlo Ghirardi, University of Trieste
Abner Shimony, Boston University

Logical Empiricism

PSA Contributed Papers

- Chair: Jane Duran, University of California—Santa Barbara
- Papers: *How Not to Russell Carnap's Aufbau*
Alan Richardson, University of Minnesota
- The Problem of Protocol Statements and Schlick's
Concept of 'Konstatierungen'*
Zhenming Zhai, University of Kentucky

*Only the PSA part of the program is listed here. Not included are the 4S program or sessions sponsored jointly by PSA and 4S.

Positivism and the Pragmatic Theory of Observation
Thomas Oberdan, Clemson University

*Logicism, Pragmatism and Metascience:
Towards a Pancritical-Pragmatic Theory of
Meta-Level Discourse*
G.S. Axtell, University of Hawaii

Conceptual Change and Discovery

Contributed Papers

Chair: Barbara von Eckardt, University of Nebraska

Papers: *Paradigms, Populations and Problem-Fields:
Approaches to Disagreement*
Douglas Allchin, University of Chicago

Local Incommensurability and Communicability
Xiang Chen, Virginia Polytechnic Institute
and State University

*Laudan's Model of Axiological Change and
the Bohr-Einstein Debate*
Henry J. Folse, Jr., Loyola University—New Orleans

Getting to the Truth Through Conceptual Revolutions
Kevin Kelly, and Clark Glymour,
Carnegie Mellon University

*Herbert Simon's Computational Models of
Scientific Discovery*
Stephen M. Downes, University of Cincinnati

Friday, October 19

Recent Work in the History of Philosophy of Science

PSA Symposium

Chair: Don Howard, University of Kentucky

Speakers: Robert Disalle, University of Western Ontario
Thomas Ryckman, Northwestern University
Joia Lewis, California State University
Klaus Hentschel, University of Hamburg

Friday, October 19

Philosophy of Biology

Contributed Papers

- Chair: Marc Ereshefsky, Washington University
- Papers: *On the Possibility of Directed Mutations in Bacteria: Statistical Analyses and Reductionist Strategies*
Sahotra Sarkar, Boston University
- Why the Anti-Reductionist Consensus Won't Survive: The Case of Classical Mendelian Genetics*
C. Kenneth Waters, Rice University
- Behavior, Biology, and Information Theory*
Dennis M. Senchuk, Indiana University
- The Phenotype as the Level of Selection: Cave Organisms as Model Systems*
Thomas C. Kane and Robert C. Richardson,
University of Cincinnati and Daniel W. Fong,
The American University

Friday, October 19

Probability, Belief, and Induction

Contributed Papers

- Chair: Paul Horwich, M.I.T.
- Papers: *Conditional Probabilities, Conditionalization, and Dutch Books*
Jordan Howard Sobel, University of Toronto
- When Fair Betting Odds are Not Degrees of Belief*
Teddy Seidenfeld, M. J. Schervish
and J. B. Kadane, Carnegie Mellon University
- Assessing Inductive Logics Empirically*
Howard Smokler, University of Colorado

Philosophy of Quantum Theory

Contributed Papers

- Chair: Paul Teller, University of Illinois—Chicago

- Papers: *Independence from Future Theories: A Research Strategy in Quantum Theory*
Alexander Rueger, University of Oregon
- Causal Independence in EPR Arguments*
Jeremy Butterfield, Cambridge University
- Jarrett Completeness and Superluminal Signals*
Frederick M. Kronz, University of Texas—Austin

Friday, October 19

Explanation in Special Sciences

Contributed Papers

- Chair: Alan Nelson, University of California—Irvine
- Papers: *Stich, Content, Prediction, and Explanation in Cognitive Science*
Charles S. Wallis, University of Minnesota
- Assessing Functional Explanations in the Social Sciences*
Harold Kincaid, University of Alabama—Birmingham

Friday, October 19

Reasoning from Phenomena: Lessons from Newton

PSA Symposium

- Chair: George Smith, Tufts University
- Speakers: William Harper, University of Western Ontario
Jon Dorling, University of Amsterdam
Howard Stein, University of Chicago

Friday, October 19

Realism

Contributed Papers

- Chair: Jarrett Leplin, University of North Carolina
- Papers: *Acceptance Without Belief*
Patrick Maher, University of Illinois—Urbana-Champaign

Scientific Realism, Perceptual Beliefs, and Justification
Richard Otte, University of California—Santa Cruz

How the Models of Chemistry Vie
James R. Hofmann, California State
University—Fullerton

*Reinventing Certainty: The Significance of Ian
Hacking's Realism*
Alan G. Gross, Purdue University—Calumet

Measurement in Quantum Mechanics

Contributed Papers

Chair: Jeffrey Bub, University of Maryland

Papers: *Kochen's Interpretation of Quantum Mechanics*
Frank Arntzenius, University of Southern California

*The Infinite Apparatus in the Quantum Theory of
Measurement*
Don Robinson, University of Toronto

Interpreting State Reduction From the Practices-up
Alberto Cordero, CUNY—Queens

*Wanted Dead or Alive: Two Attempts to Solve
Schrödinger's Paradox*
David Albert, Columbia University and
Barry Loewer, Rutgers University

Friday, October 19

Explanation and Representation in Biology

Contributed Papers

Chair: Philip Kitcher, University of California—San Diego

Papers: *The Explanatory Tools of Theoretical Population
Biology*
Gregory Cooper, SUNY—Potsdam

*The Chromosome Theory of Mendelian Inheritance:
Explanation and Realism in Theory Construction*
Marga Vicedo, University of Valencia

*Does Representational Content Arise From
Biological Function?*
Richard J. Hall, Michigan State University

Friday, October 19

Roundtable on Sources for History of Philosophy of Science

Chair: Don Howard, University of Kentucky

Participants will include: W. Gerald Heverly, Curator of the Archive for
Scientific Philosophy,
Hillman Library, University of Pittsburgh
A.J. Kox, Assistant Director of the Vienna Circle
Archive, Amsterdam

Saturday, October 20

Science as Process

PSA Symposium

Chair: Robert Brandon, Duke University

Speakers: Brent D. Mishler, Duke University
Noretta Koertge, Indiana University
Michael Bradie, Bowling Green State University
David L. Hull, Northwestern University

Computer Simulations in the Physical Sciences

PSA Symposium

Chair: James Woodward, California Institute of Technology

Speakers: Paul Humphreys, University of Virginia
Ronald Laymon, Ohio State University
Fritz Rohrlich, Syracuse University

Evaluation of Hypotheses and Theories

Contributed Papers

Chair: Sandra Mitchell, University of California—San Diego

Papers: *Measuring the Success of Science*
Ilkka Niiniluoto, University of Helsinki

*Island Biogeography, Species-Area Curves, and
Statistical Errors: Applied Biology and Scientific
Rationality*

Kristin Shrader-Frechette, University of South Florida

Ten Types of Scientific Progress

Andre Kukla, University of Toronto

Theory Pursuit: Between Discovery and Acceptance

Laurie Anne Whitt, Michigan Technological
University

*Beyond Numerical and Causal Accuracy: Expanding
the Set of Justificational Criteria*

Jeffrey L. Ramsey, University of Chicago

Saturday, October 20

Causation

Contributed Papers

Chair: Ellery Eells, University of Wisconsin

Papers: *Singular Causation and Law*
Gürol Irzik, Bogazici University, Istanbul

Causes and Laws: The Asymmetry Puzzle
Henry Byerly, University of Arizona

Saturday, October 20

Philosophy of Experiment

Contributed Papers

Chair: Davis Baird, University of South Carolina

Papers: *Scientific Evidence: Creating and Evaluating
Experimental Instruments and Research Techniques*
William Bechtel, Georgia State University

*Theory of the Apparatus and Theory of the Phenomena:
The Case of Low Dose Electron Microscopy*
Zeno G. Swijtink, Indiana University

*Reproducibility as a Methodological Imperative in
Experimental Research*
Michael J. Hones, Villanova University

Saturday, October 20

Self-Organization, Selection and Evolution

PSA Symposium

- Chair: Marjorie Grene, Virginia Polytechnic Institute and State University
- Speakers: Richard Burian, Virginia Polytechnic Institute and State University
Robert C. Richardson, University of Cincinnati
Robert E. Page, Jr., University of California—Davis
Stuart Kauffman, University of Pennsylvania

Statistical Inference and Theory Change

PSA Symposium

- Chair: Deborah G. Mayo, Virginia Polytechnic Institute and State University
- Speakers: Wesley Salmon, University of Pittsburgh
Henry Kyburg, Jr., University of Rochester
Peter Gärdenfors, Lund University

Mathematical and Physical Objects: An Ontological Dispute

PSA Symposium

- Chair: Geoffrey Hellman, University of Minnesota
- Speaker: Michael Resnik, University of North Carolina
- Commentor: Susan Hale, Texas A & M University
- Speaker: Emily Grosholz, Pennsylvania State University
- Commentor: Christopher Menzel, Texas A & M University

Saturday, October 20

Perception in Science and Philosophy of Science

Contributed Papers

- Chair: Bonnie Paller, California State University—Northridge
- Papers: *Observation: An Empirical Discussion*
Daniel Gilman, Pennsylvania State University
- Visual Perception and the Wages of Indeterminacy*
Richard Montgomery, West Virginia University

Saturday, October 20

Philosophy of Physics

Contributed Papers

- Chair: John Norton, University of Pittsburgh
- Papers: *Mathematical Physics and Elementary Logic*
Brent Mundy, Syracuse University
- Time-Travel and Topology*
Tim Maudlin, Rutgers University
- Epistemological Time Asymmetry*
Steven F. Savitt, University of British Columbia

Saturday, October 20

PSA President's Lecture

Thomas S. Kuhn, M.I.T.

Sunday, October 21

Rudolf Carnap Centennial

PSA Symposium

- Chair: Adolf Grünbaum, University of Pittsburgh
- Speakers: Michael Friedman, University of Illinois—Chicago
Burton Dreben, Harvard University
Richard Creath, Arizona State University

Implications of the Cognitive Sciences for Philosophy of Science

PSA Symposium

- Chair: Thomas Nickles, University of Nevada
- Speakers: Ronald N. Giere, University of Minnesota
Howard Margolis, University of Chicago
Nancy Nersessian, Princeton University
- Commentors: Steve Fuller, Virginia Polytechnic Institute and
State University of Virginia

Three Views of Experiment: Atomic Parity Violation

PSA Symposium

Chair: Robert Ackermann, University of Massachusetts

Speakers: Allan Franklin, University of Colorado
Andrew Pickering, University of Illinois—
Urbana-Champaign
Michael Lynch, Boston University

Laws, Conditions and Determinism

PSA Symposium

Chair: John Earman, University of Pittsburgh

Speakers: Roger Jones, Berea, Kentucky
Larry Sklar, University of Michigan
Mark Wilson, University of Illinois—Chicago