

Twenty-Second Biennial Meeting of the Philosophy of Science Association  
Montreal, Quebec, November 4-6, 2010

*Preliminary Program*

Updated: August 25, 2010

*Please direct corrections and questions about this draft program for PSA2010 to  
Steve Downes, Program Chair of PSA2010, at s.downes@utah.edu.*

**Thursday, November 4, 10:00 AM-2:00 PM**

**PSA Governing Board Meeting**

**Thursday, November 4, 2:00-4:00 PM**

**Contributed Papers: Biology: Evolution and Selection**

Trevor Pearce (University of Chicago), “Evolution and Constraints on Variation: Variant Specification and Range of Assessment”

Joshua Filler (University of Wisconsin—Madison), “Underdetermination, Pluralism, and the Levels of Selection”

Clement Loo (Indiana University—Bloomington), “Invasive Species and Evaluating Relative Significance of the Shifting Balance Theory”

Jonathan Kaplan (Oregon State University), “Relevant Similarity and the Causes of Biological Evolution: Selection, Fitness, and Statistically Abstractive Explanations”

Jay Odenbaugh (Lewis and Clark College), Chair

**Contributed Papers: Quantum Physics**

Edward Slowik (Winona State University), “A Pre-History of Quantum Gravity: Newton, Leibniz, and the Deep Metaphysics of Space”

Jill North (Yale University), “The Structure of a Quantum World”

Meinard Kuhlmann (University of Bremen), “A Trope Bundle Interpretation of Algebraic Quantum Field Theory”

Michael David Silberstein (Elizabethtown College) and Mark Stuckey (Elizabethtown College), “A New Path Integral Based Interpretation of Quantum Field Theory”

Louis Vervoort (University of Montreal), Chair

**Contributed Papers: Explanation**

Jonah N. Schupbach (University of Pittsburgh), “Comparing Probabilistic Measures of Explanatory Power”

Nicolas Fillion (University of Western Ontario), “Explanation and Abstraction: The Case of Backward Error Analysis”

Jan Sprenger (Tilburg University), “Towards a Bayesian Account of Explanatory Power”

Arnon Levy (Van Leer Jerusalem Institute), “Idealization in Explanation: A Two-Dimensional View”

Michael Trestman (University of Utah), Chair

**Contributed Papers: Physics**

Gordon Belot (University of Michigan), “A Didactic Rant, or, Of Symmetry”

Mathias Frisch (University of Maryland), “From Boltzmann to Arbuthnot: Higher-Level laws and the Best System”

Vincent Lam (University of Queensland), “Gravitational and Non-Gravitational Energy: the Need for Background Structures”

Christopher Smeenk (University of Western Ontario) and Christian Wuthrich (University of California, San Diego), “Determinism and General Relativity”

Mara Harrell (Carnegie Mellon University), Chair

**Contributed Papers: Reduction, Structure and Realism**

Joel Press (California University of Pennsylvania), “On the Virtues of Cursory Scientific Reductions”

Matteo Morganti (University of Konstanz), “Is There a Compelling Argument for Ontic Structural Realism?”

Scott Tanona (Kansas State University), “Theory-Phenomenon Correspondence and Structural Continuity”

Alberto Cordero (CUNY, Graduate Center), “Scientific Realism and the Divide et Impera Strategy: The Ether Saga Revisited”

Chair TBD

**Contributed Papers: Biology and Medicine**

Stephen Morris (College of Staten Island/CUNY), “Preserving the Concept of Race: A Medical Expedient, a Sociological Necessity”

Sharyn Clough (Oregon State University), “Gender, Germs, and Dirt”

Elselijn Kingma (Kings College, London), “Functions Revisited: What Philosophers of Biology Can Learn from Philosophers of Medicine”

Lara Huber (Mainz University), “On the Epistemic Specificity of Animal Models in Biomedical Research: The Case of ‘Alzheimer Mice’”

Anya Plutynski (University of Utah), Chair

**Contributed Papers: Mechanisms and Representation**

Jeremy Howick (University College London), “Exposing the Vanities—and a Qualified Defense—of Mechanistic Reasoning in Clinical Decision-Making”

Lane DesAutels (University of Maryland, College Park), “Regular and Irregular Characterizations of Mechanisms: A Critique”

James Alexander Overton (University of Western Ontario), “Mechanisms, Types, and Abstractions”

Zachary Clint Irving (University of Toronto), “Style, But Substance: On Graphical versus Numerical Representations in Scientific Practice”

Julian Reiss (Erasmus University), Chair

***Special Note:*** The Philosophy of Science Association is pleased to co-sponsor the following plenary session with the History of Science Society. This session is scheduled within the framework of the HSS Program; see the HSS Program for additional information.

**Thursday, November 4, 5:30-7:00 PM**

**The Challenges and Opportunities of Interdisciplinary Teaching** (Sponsored by the HSS Committee on Education)

Hanne Andersen (University of Aarhus, Denmark), “Making Better Scientists: HPS in the Science Curriculum”

Melinda Gormley (University of Puget Sound), “Applied History of Science”

Andrew Hamilton (Arizona State University), “HPS in the Science Curriculum: History and Philosophy at the Lab Bench”

Kristin Johnson (University of Puget Sound), “Why Do I Have to Take This STS Class?”

Chair: John Lynch, Arizona State University

Organizer: Kristin Johnson, University of Puget Sound

**Thursday, November 4, 4:30-6:45 PM**

**Symposium: Rediscovering Human Nature**

Karola Stotz (University of Sydney), “The Nurturing of Human Nature via Developmental and Cognitive Niche Construction”

Paul E. Griffiths (University of Sydney), “A More Biological Approach to Human Diversity”

Merlin Donald (Case Western Reserve), “Cognitive Evolution and the Definition of Human Nature”

Maria Kronfeldner (University of Bielefeld), “The Causal Conception of Human Nature in the Postgenomic Era”

Richard Samuels (Ohio State University), “Do Human Beings Have a Nature?”

**Symposium: Breaking Mechanisms: Philosophy in the Higgs Sector**

Chris Smeenk (University of Western Ontario), “Higgs and Confinement”

Michael Stoltzner (University of South Carolina), “The Higgs Mechanism as a Constraint? Or: How an Axiomatic Perspective May Ease Ontological Worries”

Doreen Fraser (University of Waterloo), “SSB: QFT vs. QSM”

Wade Struyve (Katholieke Universiteit Leuven), “Spontaneous Symmetry Breaking and the Higgs Mechanism”

**Symposium: Forging Model/World Relations**

Isabelle Peschard (San Francisco State University), “Data Models, Reliability, and the Neglected Relevance of Relevance”

Bas van Fraassen (San Francisco State University), “Modeling and Measurement: The Criterion of Empirical Grounding”

Martin Thomson-Jones (Oberlin College), “Modeling Without Mathematics”

Michael Weisberg (University of Pennsylvania), “Getting Serious About Similarity”  
Andrea Woody (University of Washington), Chair

**Symposium: The CRU E-mails: Perspectives from Philosophy of Science**

James McAllister (University of Leiden), “Rethinking the Concept of Experimental Error”  
Naomi Oreskes (University of California, San Diego), “The Climate Model E-mails: Normal Science or Ethical Dilemma?”  
Wendy S Parker (Ohio University), “The Context of Climate Science: Norms, Pressure and Progress”  
Kristin Shrader-Frechette (University of Notre Dame), “Scientifically Legitimate Ways to Cook and Trim Data: The Hacked and Leaked Climate Emails”  
Kathleen Okruhlik (University of Western Ontario), Chair

**Symposium: Becoming Scientific: How Everyday Things Travel To Science and Back (Session co-sponsored with the History of Science Society)**

Anna Alexandrova (University of Missouri, St Louis), “Values and the Science of Wellbeing: How Should They Mix?”  
Hasok Chang (Cambridge University), “Acidity: the Persistence of the Everyday in the Scientific”  
Gregory Radick (University of Leeds), “Heredity's Baggage”  
Sophia Efstathiou (Southampton University), “Using ‘Race’ in Medicine: Founding a Ballung Concept”

**Contributed Papers: Physics and Geophysics**

Wesley Van Camp (George Mason University), “On Kinematic vs. Dynamic Approaches to Special Relativity”  
Matthew Thomas Gorski (University of Notre Dame), “Brown and Janssen on the Arrow of Explanation in Special Relativity”  
Dennis Lehmkuhl (University of Wuppertal, IZWT), “Kinds of Unified Field Theories”  
Teru Miyake (Stanford University), “Underdetermination in Geophysics”  
Chair TBD

**Contributed Papers: Scientific Realism**

Darrell Rowbottom (University of Oxford), “The Instrumentalist's New Clothes”  
Jeff Kochan (University of Basel), “Rouse's Reluctant Realism”  
Samuel Gahan Ruhmkorff (Bard College at Simon's Rock), “Some Difficulties for the Problem of Unconceived Alternatives”  
Ludwig Fahrbach (University of Konstanz), “Theory Change and Degrees of Success”  
Gary Hardcastle (Bloomsburg University of Pennsylvania), Chair

**Thursday, November 4, 7:30-8:30 PM**

**PSA/HSS Reception**

**Friday, November 5, 7:45-8:45 AM**

***Philosophy of Science* Editorial Board meeting**

**Friday, November 5, 9:00-11:45 AM**

**Symposium: Sewall Wright's F-statistics: Measurement of Biological Population Structure and Its Causes**

Marshall Abrams (University of Alabama at Birmingham), "Implications of Use of Wright's FST for the Role of Probability and Causation in Evolution"

Bruce Weir (University of Washington), "The Estimation of F-statistics: An Historical View"

Kent Holsinger (University of Connecticut), "A Bayesian Approach to Geographical Genetics: What in the FST is Going On?"

Yoichi Ishida (University of Pittsburgh), "The Origins of F-statistics: Sewall Wright and Gustave Malécot on Inbreeding and Relationship"

**Symposium: New Directions Concerning Quantum Indistinguishability**

Paolo Zanardi (University of Southern California), "Quantum Tensor Product Structures Are Observable-Induced"

John Earman (University of Pittsburgh), "The Concept of Indistinguishable Particles in Quantum Mechanics"

Nick Huggett (University of Illinois at Chicago) and Tom Imbo (University of Illinois at Chicago), "Expanding the Horizons of Quantum Statistical Mechanics"

Jeremy Butterfield (Cambridge University) and Adam Caulton (Cambridge University), "On the Physical Content of the Indistinguishability Postulate"

**Symposium: Fictions and Scientific Realism**

Alisa Bokulich (Boston University), "Explanatory vs. Non-Explanatory Fictions"

Arnon Levy (Van Leer Institute), "Two Modes of Fiction and Two Forms of Realism"

Uskali Mäki (University of Helsinki), "Vaihingerian Realism"

Mauricio Suarez (Complutense University of Madrid), "Fictions, Idealizations, and Scientific Realism"

**Symposium: Philosophy of Commercialized Science**

Sergio Sismondo (Queen's University), "Corporate Interests and Medical Science: Beyond Truth or Falsity"

Rebecca Kukla (University of South Florida), "The Decentralization of Epistemic Labor in Contemporary Biomedical Research"

Justin Biddle (Georgia Institute of Technology), "Does Commercialization Inhibit the Sharing of Information?"

Tarja Knuuttila (University of Helsinki), "Contradictions of Commercialization: The Norms of Scientific Research Revealed?"

Torsten Wilholt (Bielefeld University), "Commercialized Science and the Very Idea of Disinterested Research"

Hans Radder (Vrije Universiteit Amsterdam), "Philosophical Issues in Scientific Patenting"

**Symposium: Is It the Case? Epistemological Reflections on the Use of Case Studies in the Sciences**

Rachel Ankeny (University of Adelaide), “Using Case Studies as Evidence of Phenomena: Examples from Molecular Biology”  
Mary Morgan (London School of Economics), “Case Studies: One Observation or Many?”  
Sharon Crasnow (Norco College), “The Role of Case Studies in Political Science Research”  
Carlo Gabbani (University of Florence), “Epistemology and Clinical Case Studies: Towards a Multilevel Approach”

**Contributed Papers: Methodology**

Stephanie Ruphy (University of Provence), “From Hacking’s Plurality of Styles of Scientific Reasoning to ‘Foliated’ Pluralism, a Philosophically Robust Form of Ontologico-Methodological Pluralism”  
Conor Mayo-Wilson (Carnegie Mellon University), “The Problem of Piecemeal Induction”  
Daniel Hicks (University of Notre Dame), “On the Ideal of Autonomous Science”  
David Stump (University of San Francisco), Chair

**Contributed Papers: Kinds: Chemical, Biological and Social**

Nora Berenstain (University of Texas, Austin), “Necessary Laws and Chemical Kinds: A Case Study in A Posteriori Necessity”  
Makmiller Pedroso (University of Calgary), “Essentialism, History, and Biological Taxa”  
Matthew H. Slater (Bucknell University), “A Different Kind of Property Cluster Kind”  
Thomas Reydon (Leibniz University Hannover), “Classifying Artifacts Is Like Classifying People: Looping Effects for Artifact Kinds”  
Matt Haber (University of Utah), Chair

**Friday, November 5, 1:30-3:10 PM**

**Contributed Papers: Quantum Mechanics**

Craig Callender (University of California, San Diego) and Elias Okon (Universidad Nacional Autónoma de México), “Does Quantum Mechanics Clash with the Equivalence Principle—and Does it Matter?”  
Peter Lewis (University of Miami), “Can Transactional Description of Quantum-Mechanical Reality Be Considered Complete?”  
Bryan W. Roberts (University of Pittsburgh), “How to Time-Reverse a Quantum System”  
Gemma Murray (University of Cambridge), “Is Quantum Mechanics About Quantum Information?”  
Jeff Barrett (University of California, Irvine), Chair

**Contributed Papers: Evolution, Probability and Inference**

Eric Desjardins (University of Western Ontario), “Reflections on Path Dependence and Irreversibility: Lessons from Evolutionary Biology”  
Isabelle Drouet (Université Catholique de Louvain la Neuve) and Francesca Merlin (University of Paris-Sorbonne), “The Propensity Interpretation of Fitness and the Propensity Interpretation of Probability”  
Bengt Autzen (London School of Economics), “Prior Probabilities in Bayesian Phylogenetics”

Armin Schulz (University of Wisconsin—Madison), “Gigerenzer's Evolutionary Arguments Against Rational Choice Theory: An Assessment”  
Patrick Forber (Tufts University), Chair

**Contributed Papers: Laws, Causes, and Empirical Significance**

James Justus (Florida State University), “The Search for a Formal Criterion of Empirical Significance: A Reconsideration”

Charles R. Twardy (George Mason University), “Token Causation by Probabilistic Active Paths”

Alexander Reutlinger (University of Muenster), “A Theory of Non-Universal Laws”

Wayne Myrvold (University of Western Ontario), “Deterministic Laws and Epistemic Chances”

Monika Piotrowska (University of Utah), Chair

**Contributed Papers: Cognitive Science**

Marcus P Adams (University of Pittsburgh), “Modularity, Theory of Mind, and Autism Spectrum Disorder”

Collin Rice (University of Missouri), “Massive Modularity, Content-Integration, and Language”

Corinne Bloch (Tel Aviv University), “Towards a Unified Approach to Concepts”

Elizabeth O'Neill (University of Pittsburgh), “Innateness as End-State Insensitivity with Respect to Specified Environmental Variation”

J.D. Trout (Loyola University Chicago), Chair

**Contributed Papers: Models and Modeling**

Jay Odenbaugh (Lewis and Clark), “True Lies: Realism, Robustness, and Models”

Gordon Michael Purves (University of South Carolina), “Finding Truth in Fictions: Identifying Non-Fictions in Imaginary Cracks”

Ashley Graham Kennedy (University of Virginia), “Models and Scientific Understanding”

Anna-Mari Rusanen (University of Helsinki), “An Information Semantic Account of Scientific Models”

Heather Douglas (University of Tennessee—Knoxville), Chair

**Contributed Papers: Time and Space-Time**

John Manchak (University of California, Irvine), “Time Travel: Why It May Not Pay to Work Out All the Kinks”

Eran Tal (University of Toronto), “How Accurate is the Standard Second?”

F.A. Muller (Utrecht University), “How to Discern Space-Time Points Structurally in the General Theory of Relativity”

Andreas Bartels (University of Bonn), “Dispositions, Laws, and Spacetime”

Nick Huggett (University of Illinois at Chicago), Chair

**Contributed Papers: Realism**

Greg Frost-Arnold (Hobart and William Smith Colleges), “From the Pessimistic Induction to Semantic Anti-Realism”

Muhammad Ali Khalidi (York University), “The Pitfalls of Microphysical Realism”

Ioannis Votsis (University of Düsseldorf), “The Prospective Stance in Realism”  
Leah Henderson (Massachusetts Institute of Technology), “No Miracles, No Fallacies”  
Anjan Chakravartty (University of Toronto), Chair

**Friday, November 5, 3:30-5:30 PM**

**Symposium: Building Trees: The Philosophy of Methodology in Systematics**

Marc Ereshefsky (University of Calgary), “Evolution and the Triumph of Homology”  
Richard A. Richards (University of Alabama), “Against Methods: Phylogenetic Inference and the Material Theory of Induction”  
Matt Haber (University of Utah), “Multi-Dimensional Evolutionary Trees: Simultaneously Tracking Multi-Level Lineages”  
Joel David Velasco (Stanford University), “Tree-Thinking Without the Tree”

**Symposium: Why I Care About What I Don't Yet Know: Initial Conditions and Physical and Cognitive Asymmetries in Time**

Craig Callender (University of California, San Diego) and Chris Suhler (University of California, San Diego), “Thank Goodness That Argument is Over: Explaining the Temporal Value Asymmetry”  
Mathias Frisch (University of Maryland), “A Neo-Einsteinian Account of the (Classical) Asymmetry of Radiation”  
Owen Maroney (University of Sydney), “A Broken Arrow: There's No Route from Thermodynamics to the Information Asymmetry”  
David Wallace (University of Sydney), “The Logic of the Past Hypothesis”

**Symposium: Causal Reasoning: What Can Philosophy Learn from Psychology, and What Can Psychology Learn from Philosophy**

Christopher Hitchcock (California Institute of Technology), “Actual Causation, Norms, and Models”  
Alison Gopnik (University of California, Berkeley), “When Children are Better Scientists than Scientists Are: Randomness and Rationality”  
Josh Tenenbaum (Massachusetts Institute of Technology), “The Nature and Origins of Abstract Causal Knowledge”  
Jim Woodward (University of Pittsburgh), “Causation: Interactions Between Philosophical Theories and Psychological Research”

**Symposium: Author Meets Critics: Janet Kourany's *Philosophy of Science after Feminism***

Kristina Rolin (Aalto University), “Normative Approaches to Values in Science”  
John Dupré (University of Exeter), “Problems with the Ethical Component of Scientific Theory”  
Ronald Giere (University of Minnesota), “A New Program for the Philosophy of Science”  
Miriam Solomon (Temple University), “Socially Responsible Science and the Unity of Values”  
Janet Kourany (University of Notre Dame), “Reply to Critics”



**Symposium: The Environmental Sciences at the Interface of Modeling and Policy Advice**

Jan Sprenger (Tilburg University), “Local vs. Global Approaches in Decision Theory: An Environmental Perspective”

James Justus (Florida State University), “Inferential Robustness in Environmental Modeling and Decision-Making”

Helen Regan (University of California, Riverside), “Dealing with Uncertainty in Conservation Management Decision”

Katie Steele (London School of Economics), “The Scientist qua Policy Advisor Does Make Value Judgments”

**Contributed Papers: Biology: Evolution, Genomes and Biochemistry**

Laura Perini (Pomona College), “Sequence Matters: Genomic Research and the Gene Concept”

Tudor Baetu (University of Maryland), “A Defense of Syntax-Based Gene Concepts in Postgenomics: 'Genes as Modular Subroutines in the Master Genomic Program'”

William Goodwin (Rowan University), “Structure, Function, and Protein Taxonomy”

Christophe Malaterre (University of Paris), “When Does Chemical Evolution Become Biological?”

Jim Tabery (University of Utah), Chair

**Contributed Papers: Physics**

Foad Dizadji-Bahmani (London School of Economics), “The Aharanov Approach to Equilibrium”

Olimpia Lombardi (CONICET/University of Buenos Aires), Sebastian Fortin (CONICET/University of Buenos Aires), Mario Castagnino (CONICET/University of Buenos Aires), and Juan Sebastián Ardenghi (CONICET/University of Buenos Aires), “Compatibility Between Environment-Induced Decoherence and the Modal-Hamiltonian Interpretation of Quantum Mechanics”

Armond Duwell (University of Montana), “Can Pitowsky's Quantum Subjectivism Be Justified?”

Ioan Muntean (University of Leeds), “String Theory: Explanations and Foundationalism”

James Weatherall (University of California—Irvine), Chair

**Friday, November 5, 6-7:30 PM**

**PSA Reception**

**Saturday, November 6, 7:45-8:45 AM**

**PSA Women's Caucus Breakfast**

**Saturday, November 6, 9:00-11:45 AM**

**Symposium: Heterogeneous Individuals**

Thomas Pradeu (Paris Sorbonne University), “Immunology and the Individuation of Heterogeneous Organisms”

John Dupré (University of Exeter), “Concepts of the Organism”

Frédéric Bouchard (University of Montreal), “Motley Crews of Nature: How to Individuate and Count Symbiotic Communities”

Ellen Clarke (University of Bristol), “Individuals and the Homogeneity Assumption”

### **Symposium: The Emergence of Spacetime in Quantum Theories of Gravity**

Christian Wüthrich (University of California, San Diego), “A Priori vs. A Posteriori Non-Fundamentality of Spacetime”

Nick Huggett (University of Illinois, Chicago), “Emergence and Dualities in String Theory”

Sean Carroll (California Institute of Technology), “The Future of Time”

Tim Maudlin (Rutgers University), “Can Spacetime Emerge?”

### **Symposium: Three Aspects of Theories of Imprecise Probabilities**

Horacio Arlo-Costa (Carnegie Mellon University) and Jeff Helzner (Columbia University), “Ellsberg’s Choices: Behavioral ‘Anomalies’ or New Normative Insights?”

Jim Joyce (University of Michigan), “The Challenge of Dilation for Theories of Inductive Reasoning and Decision Making”

Glenn Shafer (Rutgers University), “Interpreting Game-Theoretic Probability”

Teddy Seidenfeld (Carnegie Mellon University), Chair

### **Symposium: Improving Peer Review in the Sciences**

Edward Hackett (Arizona State University), “Competing Values of Peer Review”

Fred Kronz (National Science Foundation), “Constructive Criticisms of NSF’s Intellectual Merit Criterion”

Carole Lee (University of Washington), “Empirical Research on the Normative Functioning of Peer Review”

Helen Longino (Stanford University), “Peer Review and the Structure of Inquiry”

Miriam Solomon (Temple University), Chair

### **Symposium: Methodological Issues in Cognitive Neuroscience**

Colin Klein (University of Illinois at Chicago), “Cognitive Ontology and Region-versus Network-Oriented Analyses”

Clark Glymour (Carnegie Mellon University), “On the Limits of Psychology”

Edouard Machery (University of Pittsburgh), “Aggregated Data in Psychology and Cognitive Neuroscience”

Tal Yarkoni (Columbia University), “On the Rampant Inflation of fMRI Effects (and What to Do About It)”

### **Contributed Papers: Explanation and Reduction**

Andrew Wayne (University of Guelph), “Expanding the Scope of Explanatory Idealization”

Laura Felline (University of Cagliari), “Scientific Explanation Between Principle and Constructive Theories”

Matthew C. Haug (College of William & Mary), “Abstraction and Explanatory Relevance, or Why Do the Special Sciences Exist?”

Sorin Bangu (University of Cambridge), “On the Role of Bridge Laws in Inter-theoretic Relations”

Samuel Schindler (University of Konstanz), Chair

**Contributed Papers: Thermodynamics and Chemistry**

Kevin Davey (University of Chicago), “Thermodynamic Entropy and Its Relation to Probability”

Tarun Menon (University of California, San Diego), “The Second Law and the Asymmetry of Agency”

Daniel Parker (Virginia Tech), “On an Unbelievably Short Proof of the 2nd Law”

Karen Rae Zwier (University of Pittsburgh), “Dalton's Chemical Atoms vs. Duhem's Chemical Equivalents”

Mariam Thalos (University of Utah), Chair

**Saturday, November 6, 1:30-3:45 PM**

**Symposium: Exploring the Complementarity Between Economics and Recent Evolutionary Theory**

Philippe Huneman (Paris-Sorbonne University), “Formal Darwinism and the Organisms in Evolutionary Theory: Answering Some Challenges”

Jean Gayon (University of Paris), “Economic Natural Selection: The Problem of Inheritance”

Sacha Bourgeois-Gironde (Ecole Normal Supérieure de Lyon) and Cintia Retz Lucci (Jean Nicode Institute), “The Economic Agent: Adapted or Irrational?”

Andy Gardner (University of Oxford), “Adaptation of Genes, Individuals and Groups”

**Symposium: Boltzmann's Legacy: Outstanding Philosophical Issues in Modern Approaches to Statistical Mechanics**

Wayne Myrvold (University of Western Ontario), “On the Time-Asymmetry of the Stosszahlansatz, And Its Justification”

Jos Uffink (Utrecht University), “Will Someone Say Exactly What the H-theorem Proves?”

Giovanni Valente (University of Pittsburgh), “Can Lanford's Theorem Be Extended in Time?”

Roman Frigg (London School of Economics) and Charlotte Werndl (London School of Economics), “Justifying the Second Law: From Dynamics To Typicality and Back Again”

**Symposium: Author Meets Critics: Eric Barnes' *The Paradox of Predictivism***

P.D. Magnus (State University of New York, Albany), “Miraculous Endorsement and the Limits of Expertise”

Sherrilyn Roush (University of California, Berkeley), “Individualists Can be Predictivists Too”

Clark Glymour (Carnegie Mellon University), “Prediction, Accommodation, and the Impossibility of Science”

Eric Barnes (Southern Methodist University), “Replies”

**Symposium: Values in Science and Public Policy: Building on Douglas's *Science, Policy, and the Value-Free Ideal***

Kathleen Okruhlik (University of Western Ontario), "Risk Assessment: Science, Values, and Science Policy"

Helen Longino (Stanford University), "Individual and Social Accounts of Objectivity in Science"

Hugh Lacey (Swarthmore College), "The Responsibilities of Scientists and the Old Ideal of the Neutrality of Science"

Heather Douglas (University of Tennessee), "Theorizing Science in Society"

Kevin Elliott (University of South Carolina), Chair

**Symposium: Category Theoretical Reflections on the Foundations of Physics**

Bob Coecke (Oxford University), "Quantum Picturalism"

Klaas Landsmann (Radboud University), "Topos Theory and the Copenhagen Interpretation of Quantum Mechanics"

Jeffrey Morton (University of Western Ontario), "Groupoidification in Physics"

Gonzalo Reyes (University of Montreal), "From Laws of Motion to Vacuumfield Equations"

Steve Awodey (Carnegie Mellon University) and Hans Halvorson (Princeton University), Chairs

**Contributed Papers: Evidence, Prediction, and Chance**

P. Kyle Stanford (University of California, Irvine), "Projective Evidence and the Heterogeneity of Scientific Confirmation"

Matthew Kopec (University of Wisconsin Madison), "A More Fulfilling (and Frustrating) Take on Reflexive Predictions"

Joshua Haddock (University of Cincinnati), "The Principal Principle and Theories of Chance: Another Bug?"

David Marshall Miller (Duke University), "Friedman's Dynamics of Reason, Galileo's Archimedean Approximation, and Reciprocal Iteration"

Laurent Jodoin (University of Montreal), Chair

**Contributed Papers: Cognitive Sciences and Neuroscience**

Kent Johnson (University of California, Irvine), "A Lot of Data"

Jonathan Livengood (University of Pittsburgh), "Folk Intuitions and Theories of Actual Causation: A Hitch in Hitchcock's Account"

Adrienne Prettyman (University of Toronto), "Investigating Intrinsic Brain Activity: A Role for Exploratory Introspection"

William Bechtel (University of California, San Diego), "What Causes You to Sleep? Ask a Fly"

David Danks (Carnegie Mellon University), Chair

**Saturday, November 6, 4:30-6:30 PM**

**PSA Presidential Address**

**Saturday, November 6, 6:30-8:00**

## **PSA/HSS Reception**