Programme of EPSA11  
Athens 5-8 October 2011

Wednesday, October 5th

11.00-14.00 Registration
14.00-14.30 Opening of the conference (Great Hall)
14.30-16.00 Plenary lecture (Great Hall)  
Chair: Stathis Psillos
Helen Longino (Stanford University)  
The Sociality of Scientific Knowledge: Not Just an Academic Question

16.00-16.30 Tea Break

16.30-19.00 Parallel sessions  
Models in Explanation (Drakopoulou)  
Chair: Dionysis Anapolitanos
Anna-Mari Rusanen: Information Semantics and the Problem of Imaginary Models
Alisa Bokulich: Explanatory Models vs. Predictive Models: Some Lessons from Geomorphology
Joel Katzav: Climate models and Inference to the Best Explanation
Emanuele Serrelli: Mendelian Population as a Model, Intended as a “Stable Target of Explanation”
Demetris Portides: Idealization and Scientific Models: Reducing the Information Content

Science and Democracy (New Amphitheatre)  
Chair: Kristina Rolin
Kristen Intemann and Inmaculada De Melo-Martín: Scientific Dissent, Objectivity, and Public Policy
José Luis Luján and Oliver Todt: Epistemic and Non-Epistemic Values in Regulatory Science: The Case of Risk Assessment
Matthew J. Brown: The Democratic Control of the Scientific Control of Politics
Rose-Mary Sargent: Early Twentieth Century Debates over Science in the Public Interest
Elisabeth Nemeth: What is the Role Science Can (And Ought to) Play in Democratic Decision-Making? Harry Collins’ “Normative Theory of Expertise” in Historical Perspective

Philosophy of the Life Sciences (Palamas 1)  
Chair: Kenneth Waters
Kirsten Schmidt: What Genes are not—The Postgenomic Gene as a Process Gene
Christopher Pearson: Description versus Explanation in Developmental Biology
Marta Bertolaso: An Apparent Circular Causality to Account for the Phenotypic Stability of the Organism: Insights From the Biology of Cancer
Emily Parke: Lessons from Arsenic Bacteria? Methodology and Implications of the Search for Alternative Life Forms
Alex Broadbent: A Theory of General Causation for Epidemiology

Philosophy of Experimental Practice (Palamas 2)
Chair: Pieter Vermaas
Sally Riordan: *The First Determination of the Kilogram, 1790-1799: A Fresh Look at the Theoretical-Observational Divide*
Roger Stanev: *The Justification of Statistical Decisions in Clinical Trials*
Efi Kyprianidou: *On the Nature of Scientific Photography: Questions of Representing and Viewing*
Sophia Efstatithiou and Eric Silverman: *Conceptual Frameworks and Interdisciplinarity: Modelling Ageing Populations*

*Philosophy of Psychology and Psychiatry (Palamas 3)*
Chair: Drakoulis Nikolinakos
Adela Roszkowska: *The Cognitive Impenetrability of Perception and the Theory-ladenness of Observation Debate*
Panagiotis Oulis: *Explanatory Coherence, Partial Truth and the Distinction Between Validity and Utility of Psychiatric Diagnosis*
Thomas Sturm: *Metacognition and the Rationality Debate in Psychology*
Itay Shani: *Making it Mental: In Search of the Golden Mean of the Extended Cognition Controversy*
Matt Bateman: *Experimental Inquiry in Cognitive Neuroscience*

19.30-20.30 Opening Reception (Palamas Building)

Thursday, October 6th

09.00-11.00 Parallel sessions
Symposium: *Is there a Nature of the Chemical Bond?* (Drakopoulou)
Chair: Theodore Arabatzis
Michael Weisberg, Julia Bursten, Robin Hendry and Paul Needham

Symposium: *From Evolution to Development and Back: Towards a Developmental Theory* (New Amphitheatre)
Chair: Uskali Maki
Lucie Laplane, Francesca Merlin, Antonine Nicoglou and Thomas Pradeu

*Philosophy of Quantum Mechanics I (Palamas 1)*
Chair: Dennis Dieks
Laura Felline: *It’s a Matter of Principle. Principle Reconstructions of QT and Their Contribution to the Understanding of the Quantum World*
Juan Sebastián Ardenghi, Olimpia Lombardi And Martín Narvaja: *Consecutive Measurements and Modal Interpretations*
Albert Solé: *The Redundancy Argument and the Many Interpretations of Bohmian Mechanics*
Richard Healey: *How to Use Quantum Theory Locally to Explain EPR-Bell Correlations*

Mechanisms in Explanation (Palamas 2)
Chair: Erik Weber
Eleanor Knox: *The Limits of Abstraction: Finding Space for Novel Explanation*
Jaakko Kuorikoski and Petri Ylikoski: *How Organization Explains*
Robert Richardson, Fred Boogerd and Frank Bruggeman: *Articulating Mechanisms*
Samuel Schindler: *Mechanistic Explanations: Asymmetry Lost*

*Philosophy of the Cognitive Sciences I* (Palamas 3)
Chair: Eduard Machery
Lilia Gurova: *Principles vs. Mechanisms in Cognitive Science*
Lena Kästner: *Interventionism Cannot Cross*
Markus Eronen: *Pluralistic Physicalism and the Causal Exclusion Argument*
Emma Martín Álvarez, Paco Calvo and Angel García Rodríguez: *Cognitive Mechanisms as Biological, not Physical Mechanisms*

**11.00-11.30 Coffee Break**

**11.30-13.30 Parallel sessions**
Symposium: *Symmetries, Superselection and Statistics* (Drakopoulou)
Chair: Steven French
Adam Caulton, David Baker, Hans Halvorson, Klaas Landsman and Noel Swanson

Symposium: *The Reliability of Climate Model Predictions* (New Amphitheatre)
Chair: Roman Frigg
Katie Steele, Charlotte Werndl, Arthur Petersen, Jan Sprenger and Seamus Bradley

*Realism and Anti-realism I* (Palamas 1)
Chair: Anjan Chakravartty
Emma Ruttkamp: *A Novel Defence of the Retrospective Nature of Reference*
Alberto Cordero: *Theory-parts for Realists*
Dean Peters: *Partial Realism, Anti-realism and Deflationary Realism: Can History Settle the Argument?*
Luca Tambolo: *The Normative Naturalist against the Pessimistic Induction*

*Science as Collective Knowledge* (Palamas 2)
Chair: Vasso Kindi
Hanne Andersen: *Acting out of Line: On Joint Accept and Unilateral Rescission in Scientific Groups*
Cyrille Imbert: *Collective Science: How not to Lose Scientific Understanding?*
Adam Toon: *Friends at Last? Distributed Cognition and the Cognitive/Social Divide*
Thomas Boyer: *Is a Bird in the Hand Worth Two in the Bush? Or, Whether Scientists Should Publish Intermediate Results*

*Philosophy of the Cognitive Sciences II* (Palamas 3)
Chair: Lilia Gurova
Victor Verdejo: *Computationalism, Connectionism, Dynamicism and Beyond: Looking For An Integrated Approach To Cognitive Science*
Sebastien Gandon: *Diagrams and Pre-Hilbertian Geometry*
Norman Sieroka: *Neurophenomenology of Hearing: Relations to Intentionality and Time Consciousness*
Lieven Decock and Igor Douven: *Qualia Compression*

**13.30-15.00** Lunch (Women’s Caucus meeting 14.00-15.00 — Palamas Building)
15.00-16.30 **Plenary lecture** (Great Hall)
Chair: Fritz Stadler
Dan Sperber (Institut Jean Nicod, ENS)
*The Argumentative Theory of Reasoning and its Relevance to the Study of Science*

16.30-17.00 Tea Break

17.00-19.00 **Parallel sessions**
Symposium: *Can We Really Lewis the Laws of Nature?* (Drakopoulou)
Chair: Gerhard Schurz
Thomas Müller, Marcus Schrenk, Jesse Mulder and Carl Hoefer

Symposium: *Cognitive and Evolutionary Foundations of Human Sociality* (New Amphitheatre)
Chair: Matti Sintonen
Francesco Guala, Benoit Dubreuil, Christophe Heintz, Eduard Machery and Alejandro Rosas

*Philosophy of Quantum Mechanics II* (Palamas 1)
Chair: Miklos Redei
Aristidis Arageorgis and Chrysovalantis Stergiou: *On Particle Phenomenology Without Particle Ontology: How Much Local is Almost Local?*
Foad Dizadjii-Bahmani: *Why I am not an Everettian*
Iñaki San Pedro: *Freeing Free Will from Conspiracy*
Dunja Seselja and Christian Straßer: *Abstract Argumentation Applied to Scientific Debates*

*Local Epistemologies* (Palamas 2)
Chair: James MacAllister
Saana Jukola: *Defending the Social View on Objectivity*
Maria Cristina Amoretti and Nicla Vassallo: *Situatedness and Objectivity: Scientific Knowledge without Standpoints*
Endla Lõhkivi: *Is Workplace Culture Relevant for Philosophy of Science? A Case Study on Physics and Humanities*
Jouni-Matti Kuukkanen: *I Am Knowledge: Get Me Out of Here! On Localism and the Universality of Science*

*Philosophy of Mathematics* (Palamas 3)
Chair: Costas Dimitracopoulos
Demetra Christopoulou: *On a Double Aspect of Natural Numbers as Abstract Particulars and/or Universals*
Paola Cantu: *Kant and 20th Century Philosophy of Mathematics*
Mark Colyvan: *A Ricci Curvature Tensor by any Other Name*
Jean-Pierre Marquis: *Mathematical Identity as a Derived Logical Relation*

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**Friday, October 7th**
09.00-11.00 Parallel sessions
Symposium: New Challenges for Philosophy of Science (Drakopoulou)
Chair: Maria-Carla Galavotti
Raffaella Campaner, Theo Kuipers, Daniel Andler, Olav Gjelsvik and Roman Frigg

Chair: Rose-Mary Sargent
Rebecca Kukla, Justin Biddle, Torsten Wilholt, Bryce Huebner and Eric Winsberg

Formal Philosophy of Science I (Palamas 1)
Chair: Jesús Zamora Bonilla
Ilkka Niiniluoto: Models, Simulation, and Analogical Inference
Petros Stefaneas: Theories and Abstract Model Theory
Gustavo Cevolani, Vincenzo Crupi and Roberto Festa: More Verisimilar Banking: A Novel Analysis of the Linda Paradox
Doukas Kapantais: Formal Intuitionistic Semantics for Fitch’s Paradox

Models and Simulations in the Life Sciences (Palamas 2)
Chair: Jeremy Howick
Sara Green: Exploratory Models - Reverse Engineering in Systems Biology
Tarja Knuuttila and Andrea Loettgers: Synthetic Biology and the Functional Meaning of Noise
Bettina Schmietow and Lorenzo Del Savio: Cells from Computers: from Ethics to Epistemology
Tim Räz and Raphael Scholl: Why Do We Model?

Philosophy of Quantum Mechanics III (Palamas 3)
Chair: Vassilis Karakostas
Jonathan Bain: CPT Invariance, the Spin-Statistics Connection, and the Ontology of Relativistic Quantum Field Theories
Karim Bschir, Michael Epperson and Elias Zafiris: Decoherence: A View from Topology
Gordon Purves: Lies, Damn Lies, and Quantum Statistics: Confirmation and False Posits
Mario Bacelar Valente: Are Virtual Quanta Nothing but Formal Tools?

11.00-11.30 Coffee Break

11.30-13.30 Parallel sessions
Symposium: Lawish Generalizations in the Special Sciences (Drakopoulou)
Chair: Robin Hendry
Craig Callender and Jonathan Cohen, Julian Reiss, Daniel Steel, Andreas Hüttemann and Alexander Reutlinger

Theories of Human Nature (New Amphitheatre)
Chair: Rebecca Kukla
Maria Kronfeldner: The Full Slate: Human Nature and Causation
Rasmus Gronfeldt Winther: The Genetic Reification of “Race”? A Story of Two Mathematical Methods
Johannes Martens: *Altruism, Correlation and Causality*
Till Grüné-Yanoff: *Evolutionary Game Theory, Learning Dynamics and Mechanisms*

*Theories of Theories* (Palamas 1)
*Chair*: Paul Hoyningen-Huene
Francesca Pero: *Actual Theorizing and the Model-Theoretic Account*
Rogier De Langhe: *The Problem of Kuhnian Rationality*
Chuang Liu: *A Critique of the Deflationary View on Scientific Representation*
Fabian Lausen: *Heuristic Reductionism and the Concept of a Research Directive*

*Philosophy of Space and Time I* (Palamas 2)
*Chair*: Mauro Dorato
Adán Sus: *The Physical Significance of Symmetries and Conservation Laws*
Erik Curiel: *On the Thermodynamical Character of Black Holes in Classical General Relativity*
Arianne Shahvisi: *The Gravity of the Past Hypothesis: Lessons Learnt from Earman and Wallace*
F.A. Muller: *Structuralism and Space-Time*

*Trust and Peer Review in Science* (Palamas 3)
*Chair*: Henk de Regt
Susann Wagenknecht: *Epistemic Trust: An Empirical Study in Natural Science*
Jeroen De Ridder: *Trust in Science: Nicety or Necessity?*
Laszlo Kosolosky: *The Role of ‘Peer Review’ in Science: Exploring How and Why the IPCC Blundered on the Melting Rate of Himalayan Glaciers*
Maria Rentetzi: *What Does Happen to Knowledge with the New System of Single-Blind Peer Review?*

13.30-15.00 Lunch

15.00-16.30 *General Assembly Meeting (EPSA)* (Drakopoulou)

16.30-17.00 Tea Break

17.00-19.00 *Parallel sessions*
Symposium: *Perspectives on Spontaneous Symmetry Breaking in and Beyond the Standard Model* (Drakopoulou)
*Chair*: Richard Healey
Arianna Borrelli, Koray Karaca, Michael Stöltzner and Simon Friederich

Symposium: *Modelling Social Aspects of Science* (New Amphitheatre)
*Chair*: Ilkka Niiniluoto
Jesús Zamora Bonilla, Stephan Hartmann, Ryan Muldoon, J. McKenzie Alexander, and Gerhard Schurz

*Formal Philosophy of Science II* (Palamas 1)
*Chair*: Theo Kuipers
Joshua Haddock: *The Principal Principle, and Theories of Chance: An Account of Primitive Conditional Chance*
Wolfgang Pietsch: *The Limits of Probabilism*
Jon Williamson: *From Bayesian Epistemology to Inductive Logic*
Peter Brössel: *The Significance of Confirmation*

*Realism and Anti-realism II* (Palamas 2)
*Chair*: Andreas Huttemann
Paul Hoyningen-Huene: *The Ultimate Argument against Convergent Realism and Structural Realism: The Impasse Objection*
Simon Fitzpatrick: *Doing Away with the No Miracles Argument: Realism, Empirical Success and Confirmation*
Raphaël Künstler: *Should we be Pessimistic? — A Critique of Stanford’s Underdetermination*
Murat Bac: *Natural Ontological Misrepresentation and Subtleties of Neo-Realism*

*Theories of Natural Kinds* (Palamas 3)
*Chair*: Thomas Reydon
Elena Casetta: *Outlining a Unified Framework for Assessment of the Biodiversity*
Samuli Pöyhönen: *Should I Split or Should I Lump? The Epistemic-Tool Approach to Scientific Concept Formation*
Sören Häggqvist: *Kinds Without Explanation*
Miles Macleod: *What Kind of Kinds are Homologies? Studying Homology Concepts as Significant Kinds*

20.00-22.30 Conference Dinner

**Saturday, October 8th**

09.00-11.00 Parallel sessions

*Symposium*: *Where to Draw the Line Between What’s Real and Unreal in Biological Knowledge* (Drakopoulou)
*Chair*: Mark Colyvan
Marcel Weber, Kenneth Waters, Steven French and Holger Lyre

*Symposium*: *Technical Functions and Artefacts in Philosophy* (New Amphitheatre)
*Chair*: Chrysostomos Mantzavinos
Wybo Houkes, Pieter Vermaas, Mieke Boon, Thomas Reydon and Erik Weber

*Pluralism and Reductionism* (Palamas 1)
*Chair*: Daniel Andler
Stéphanie Ruphy: ‘Foliated’ Pluralism: *A Philosophically Robust Form of Ontologico-Methodological Pluralism*
Robert Kowalenko: ‘Styles of Scientific Thinking Can Kill’
Anjan Chakravartty: *Realism about Scientific Taxonomy*
Henrik Thorén: *What is an Interdisciplinary Problem?*

*Philosophy of the Social Sciences* (Palamas 2)
*Chair*: Stephan Hartmann
Yulie Foka-Kavalieraki and Aristides Hatzis: *Economics, Evolution, and the Brain: From Rational Choice Theory to Ecological Rationality*
Thomas Uebel: *Narratives and Action Explanation*
Uskali Mäki: *On the Performance of the Performativity Thesis*
Jan Faye: *How Do We Understand in Science?*

**Epistemic Virtues and Theory Assessment** (Palamas 3)
Chair: Alberto Cordero
Milena Ivanova: *Can Theoretical or Intellectual Virtues Solve the Problem of Underdetermination of Theory by Data?*
Kate Hodesdon and Kit Patrick: *Is Theory Choice Using Epistemic Virtues Possible?*
Harvey Siegel: *Relativism and the Strong Programme Reconsidered*
Vincent Ardourel: *Strong Underdetermination of Theories by Data: The Case of Different Mathematical Formulations of a Scientific Theory*

11.00-11.30 Coffee Break

11.30-13.30 Parallel sessions
Symposium: *Emotion in Scientific Reasoning* (Drakopoulou)
Chair: Hanne Andersen
James Mcallister, Jeff Kochan, Lisa Osbeck, Nancy Nersessian and Sabine Roeser

**Ontology and Structural Realism** (New Amphitheatre)
Chair: Carl Hoefer
Federico Laudisa: *Can There be a Truly ‘Ontological’ Scientific Naturalism?*
Mauro Dorato: *How to Combine (And not to Combine) Physics and Metaphysics*
Vincent Lam and Christian Wüthrich: *No Categorical Support for Radical Ontic Structural Realism*
Kerry Mckenzie: ‘Humean Structuralism’ About Laws

**Theories of Natural Selection** (Palamas 1)
Chair: Miles Macleod
Jonathan Everett: *Evolutionary Theory and Thermodynamics: The Role of Statistics*
David Crawford: *Probability Measures and Biological Fitness*
Fridolin Gross and Cecilia Nardini: *Is Natural Selection a Mechanism?*
Francis Cartieri: *Is Neo-Darwinism in Crisis? Lamarck and Epigenetic Inheritance*

**Reduction and Idealization in the Physical Sciences** (Palamas 2)
Chair: Mauricio Suarez
Nasim Bouatta and Jeremy Butterfield: *Emergence and Reduction Combined in Infinite Systems*
Mathias Frisch: *Incantations of ‘Causation’ and Other Philosophical Sins, Or: Rehabilitating Ritz*
Iulian Toader: *The Dappling Effects of Idealization*

**Philosophy of Space and Time II** (Palamas 3)
Chair: Vassilis Sakellariou
Lisa Leininger: *Presentism, Eternalism, and the Possibility of Temporal Becoming*
Daniel Wohlfarth: *A New View of “Fundamentality” for Time Asymmetries in Modern Physics*
Henrik Zinkernagel: *A Critical Note on Time in the Multiverse*
Matt Farr: *On the Status of Temporal Unidirectionality in Physics*
13.30-14.30 Lunch

14.30-16.00 Springer Lecture in the Philosophy of Science (Great Hall)
   Chair: Martin Carrier
   Nancy Cartwright (LSE)
   Evidence, Argument and Mixed Methods

16.00-16.30 Closing