# Programme of EPSA11 Athens 5-8 October 2011

# Wednesday, October 5<sup>th</sup>

**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

Sjoerd D. Zwart: Models as Artifacts: The Neutrality Thesis for Engineering Models

Roger Stanev: The Justification of Statistical Decisions in Clinical Trials

Efi Kyprianidou: On the Nature of Scientific Photography: Questions of Representing

and Viewing

Sophia Efstathiou and Eric Silverman: Conceptual Frameworks and

Interdisciplinarity: Modelling Ageing Populations

*Philosophy of Psychology and Psychiatry* (Palamas 3)

Chair: Drakoulis Nikolinakos

Adela Roszkowski: 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 6<sup>th</sup>

### 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 Garcia Rodriguez: 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

Víctor 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 Dizadji-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

# Friday, October 7<sup>th</sup>

#### **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

Symposium: The Social Organization of Research and the Flow of Scientific

Information (New Amphitheatre)

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 Kapantaïs: 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 Grønfeldt Winther: The Genetic Reification of "Race"? A Story of Two

Mathematical Methods

Johannes Martens: Altruism, Correlation and Causality

Till Grüne-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 tto

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

Nazim Bouatta and Jeremy Butterfield: Emergence and Reduction Combined in

Infinite Systems

Mathias Frisch: Incantations of 'Causation' and Other Philosophical Sins, Or:

Rehabilitating Ritz

Ave Mets: Measurement Theory, Nomological Machine and Measurement

*Uncertainties (in Classical Physics)* 

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