

TABLE OF CONTENTS

MARCEL WEBER, Preface	ix
-----------------------------	----

Team A: Formal Methods

1 SEAMUS BRADLEY, Dutch Book Arguments and Imprecise Probabilities	3
2 TIMOTHY CHILDERS, Objectifying Subjective Probabilities: Dutch Book Arguments for Principles of Direct Inference	19
3 ILKKA NIINILUOTO, The Foundations of Statistics: Inference vs. Decision	29
4 ROBERTO FESTA, On the Verisimilitude of Tendency Hypotheses	43
5 GERHARD SCHURZ, Tweety, or Why Probabilism and Even Bayesianism Need Objective and Evidential Probabilities	57
6 DAVID ATKINSON AND JEANNE PEIJENBURG, Pluralism in Probabilistic Justification	75
7 JAN-WILLEM ROMEIJN, RENS VAN DE SCHOOT, AND HERBERT HOIJTINK, One Size Does Not Fit All: Proposal for a Prior-adapted <i>BIC</i>	87

Team B: Philosophy of the Natural and Life Sciences

Team D: Philosophy of the Physical Sciences

8 MAURO DORATO, Mathematical Biology and the Existence of Biological Laws	109
9 FEDERICA RUSSO, On Empirical Generalisations	123
10 SEBASTIAN MATEIESCU, The Limits of <i>Interventionism</i> – Causality in the Social Sciences	141

11	MICHAEL ESFELD, Causal Realism	157
12	HOLGER LYRE, Structural Invariants, Structural Kinds, Structural Laws	169
13	PAUL HOYNINGEN-HUENE, Santa's Gift of Structural Realism	183
14	STEVEN FRENCH, The Resilience of Laws and the Ephemerality of Objects: Can a Form of Structuralism Be Extended to Biology?	187
15	MICHELA MASSIMI, Natural Kinds, Conceptual Change, and the Duck-bill Platypus: LaPorte on Incommensurability	201
16	THOMAS A. C. REYDON, Essentialism About Kinds: An Undead Issue in the Philosophies of Physics and Biology?	217
17	CHRISTIAN SACHSE, Biological Laws and Kinds within a Conservative Reductionist Framework	231
18	MARIE I. KAISER, Why It Is Time to Move beyond Nagelian Reduction	245
19	CHARLOTTE WERNDL, Probability, Indeterminism and Biological Processes	263
20	BENGT AUTZEN, Bayesianism, Convergence and Molecular Phylogenetics	279
Team C: Philosophy of the Cultural and Social Sciences		
21	ILKKA NIINILUOTO, Quantities as Realistic Idealizations	297
22	MARCEL BOUMANS, Mathematics as Quasi-matter to Build Models as Instruments	307
23	DAVID F. HENDRY, Mathematical Models and Economic Forecasting: Some Uses and Mis-Uses of Mathematics in Economics	319
24	JAVIER ECHEVERRIA, Technomathematical Models in the Social Sciences	337
25	DONALD GILLIES, The Use of Mathematics in Physics and Economics: A Comparison.....	351

26 DANIEL ANDLER, Mathematics in Cognitive Science.....	363
27 LADISLAV KVASZ, What Can the Social Sciences Learn from the Process of Mathematization in the Natural Sciences	379
28 MARIA CARLA GALAVOTTI, Probability, Statistics, and Law	391
29 ADRIAN MIROIU, Experiments in Political Science: The Case of the Voting Rules	403

Team E: History of the Philosophy of Science

30 VOLKER PECKHAUS, The Beginning of Model Theory in the Algebra of Logic	419
31 GRAHAM STEVENS, Incomplete Symbols and the Theory of Logical Types	431
32 DONATA ROMIZI, Statistical Thinking between Natural and Social Sciences and the Issue of the Unity of Science: From Quetelet to the Vienna Circle	443
33 ARTUR KOTERSKI, The Backbone of the Straw Man Popper's Critique of the Vienna Circle's Inductivism	457
34 THOMAS UEBEL, Carnap's Logic of Science and Personal Probability	469
35 MICHAEL STÖLTZNER, Erwin Schrödinger, Vienna Indeterminist	481
36 MIKLÓS RÉDEI, Some Historical and Philosophical Aspects of Quantum Probability Theory and its Interpretation	497
Index of Names	507