Contents

га	rt 1 Scientific Practices and Philosophical Traditions	
1	The Tradition of Scientific Philosophy in Romania	3
2	What Ought to Be Done and What Is Forbidden: Rules of Scientific Research as Categorical or Hypothetical Imperatives Mircea Flonta	25
Pa	rt II Mind, Language, and Technology	
3	Memory as Window on the Mind	45
4	A Momentous Triangle: Ontology, Methodology and Phenomenology in the Philosophy of Language	55
5	On Rule Embedding Artifacts	71
6	Issues in Modeling Open-Ended Evolution	87
Par	rt III Logic, Semantics, and Social Choice	
7	On a Combination of Truth and Probability: Probabilistic Independence-Friendly Logic	105
8	A Remark on a Relational Version of Robinson's Arithmetic Q	125

9	The Simple Majority Rule in a Three-Valued Logic Framework Adrian Miroiu	131
10	A Free Logic for Fictionalism	149
Par	t IV Quantum Phenomena, Scientific Realism, and Emergence	
11	Quantum Mechanics: Knocking at the Gates of Mathematical Foundations	167
12	The Quantum Vacuum Gheorghe S. Paraoanu	181
13	Structural Pluralism and S-Dualities: A Project in String Realism \dots Ioan Muntean	199
14	The Prospects for Fusion Emergence	221
Par	t V Explanation, Models, and Mechanisms	
15	Scientific Progress, Understanding and Unification	239
16	When Is a Mechanistic Explanation Satisfactory? Reductionism and Antireductionism in the Context of Mechanistic Explanations Tudor M. Băetu	255
17	Causal and Mechanistic Explanations, and a Lesson from Ecology \ldots Viorel Pâslaru	269
18	Against Harmony: Infinite Idealizations and Causal Explanation Iulian D. Toader	291