

Contents

<i>List of Contributors</i>	page vii
<i>Preface</i>	xi
Introduction	1
Part I Ontology from Different Interpretations of Quantum Mechanics	7
1 Ontology for Relativistic Collapse Theories WAYNE C. MYRVOLD	9
2 The Modal-Hamiltonian Interpretation: Measurement, Invariance, and Ontology OLIMPIA LOMBARDI	32
3 Quantum Mechanics and Perspectivalism DENNIS DIEKS	51
4 Quantum Physics Grounded on Bohmian Mechanics NINO ZANGHÌ	71
5 Ontology of the Wave Function and the Many-Worlds Interpretation LEV VAIDMAN	93
6 Generalized Contexts for Quantum Histories MARCELO LOSADA, LEONARDO VANNI, AND ROBERTO LAURA	107
Part II Realism, Wave Function, and Primitive Ontology	119
7 What Is the Quantum Face of Realism? JAMES LADYMAN	121
8 To Be a Realist about Quantum Theory HANS HALVORSON	133

vi	<i>Contents</i>	
9	Locality and Wave Function Realism ALYSSA NEY	164
	Part III Individuality, Distinguishability, and Locality	183
10	Making Sense of Nonindividuals in Quantum Mechanics JONAS R. B. ARENHART, OTÁVIO BUENO, AND DÉCIO KRAUSE	185
11	From Quantum to Classical Physics: The Role of Distinguishability RUTH KASTNER	205
12	Individuality and the Account of Nonlocality: The Case for the Particle Ontology in Quantum Physics MICHAEL ESFELD	222
13	Beyond Loophole-Free Experiments: A Search for Nonergodicity ALEJANDRO A. HNILO	245
	Part IV Symmetries and Structure in Quantum Mechanics	267
14	Spacetime Symmetries in Quantum Mechanics CRISTIAN LÓPEZ AND OLIMPIA LOMBARDI	269
15	Symmetry, Structure, and Emergent Subsystems NATHAN HARSHMAN	294
16	Majorization, across the (Quantum) Universe GUIDO BELLOMO AND GUSTAVO M. BOSYK	323
	Part V The Relationship between the Quantum Ontology and the Classical World	343
17	A Closed-System Approach to Decoherence SEBASTIAN FORTIN AND OLIMPIA LOMBARDI	345
18	A Logical Approach to the Quantum-to-Classical Transition SEBASTIAN FORTIN, MANUEL GADELLA, FEDERICO HOLIK, AND MARCELO LOSADA	360
19	Quantum Mechanics and Molecular Structure: The Case of Optical Isomers JUAN CAMILO MARTÍNEZ GONZÁLEZ, JESÚS JAIMES ARRIAGA, AND SEBASTIAN FORTIN	379
	<i>Index</i>	393