

## TABLE OF CONTENTS

PREFACE	V
INTRODUCTION	IX

### PART I / LOGIC

G. KREISEL / A Notion of Mechanistic Theory	3
ROLAND FRAÏSSÉ / Essai sur la logique de l'indéterminisme et la ramification de l'espace-temps	19
HILARY PUTNAM / How to Think Quantum-Logically	47
GARY M. HARDEGREE / The Conditional in Quantum Logic	55
D. J. FOULIS and C. H. RANDALL / Empirical Logic and Quantum Mechanics	73
RICHARD J. GREECHIE / Some Results from the Combinatorial Approach to Quantum Logic	105

### PART II / PROBABILITY

J. M. JAUCH / The Quantum Probability Calculus	123
ZOLTAN DOMOTOR / The Probability Structure of Quantum- Mechanical Systems	147
TERRENCE L. FINE / Towards a Revised Probabilistic Basis for Quantum Mechanics	179
TED BASTIN / Probability in a Discrete Model of Particles and Ob- servations	195
NANCY DELANEY CARTWRIGHT / Superposition and Macroscop- ic Observation	221
ØISTEIN BJØRNESTAD / A Note on the So-Called Yes-No Experi- ments and the Foundations of Quantum Mechanics	235

### PART III / COMPLETENESS

ARTHUR FINE / On the Completeness of Quantum Theory	249
---	-----

BAS C. VAN FRAASSEN / The Einstein-Podolsky-Rosen Paradox	283
PATRICK SUPPES and MARIO ZANOTTI / Stochastic Incompleteness of Quantum Mechanics	303
ROBERT W. LATZER / Errors in the No Hidden Variable Proof of Kochen and Specker	323
DAVID J. ROSS / Operator-Observable Correspondence	365
JEFFREY BUB / Randomness and Locality in Quantum Mechanics	397
WILLIAM DEMOPOULOS / Fundamental Statistical Theories	421
ALFRED LANDÉ / Why the World Is a Quantum World	433
PATRICK SUPPES and MARIO ZANOTTI / On the Determinism of Hidden Variable Theories with Strict Correlation and Conditional Statistical Independence of Observables	445
 BIBLIOGRAPHY ON THE HISTORY AND PHILOSOPHY OF QUANTUM PHYSICS: Compiled by Donald Richard Nilson	
INDEX OF NAMES	457
INDEX OF SUBJECTS	521
INDEX OF SUBJECTS	529