

Metaphysics in Contemporary Physics

Edited by

Tomasz Bigaj
Christian Wüthrich



BRILL
RODOPI

LEIDEN | BOSTON

CONTENTS

<i>Tomasz Bigaj and Christian Wüthrich</i> , Introduction	7
<i>Steven French and Kerry McKenzie</i> , Rethinking Outside the Toolbox: Reflecting Again on the Relationship between Philosophy of Science and Metaphysics.	25
<i>Douglas Kutach</i> , Ontology: An Empirical Fundamentalist Approach.	55
<i>Vincent Lam</i> , Quantum Structure and Spacetime	81
<i>Dean Rickles and Jessica Bloom</i> , Things Ain't What They Used to Be. Physics Without Objects	101
<i>Olimpia Lombardi and Dennis Dieks</i> , Particles in a Quantum Ontology of Properties	123
<i>Tomasz Bigaj</i> , Essentialism and Modern Physics	145
<i>Thomas Møller-Nielsen</i> , Symmetry and Qualitativity	179
<i>Matteo Morganti</i> , Relational Time	215
<i>Antonio Vassallo</i> , General Covariance, Diffeomorphism Invariance, and Background Independence in 5 Dimensions	237
<i>Ioan Muntean</i> , A Metaphysics from String Dualities: Pluralism, Fundamentalism, Modality	259
<i>Adam Caulton</i> , Is Mereology Empirical? Composition for Fermions.	293
<i>Andreas Hüttemann</i> , Physicalism and the Part-Whole Relation	323
<i>Jessica Wilson</i> , Metaphysical Emergence: Weak and Strong	345
<i>Mauro Dorato and Michael Esfeld</i> , The Metaphysics of Laws: Dispositionalism vs. Primitivism	403
<i>Marek Kuś</i> , Classical and Quantum Sources of Randomness.	425
<i>Jeremy Butterfield and Nazim Bouatta</i> , Renormalization for Philosophers	437