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Autore	Kuhlmann Meinard
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Nota di contenuto	Frontmatter -- Contents -- Preface -- Part I. Ontology and Quantum Field Theory -- 1. Introduction -- 2. Philosophical Background -- 3. Ontology and Physics -- 4. History and Basic Structure of QFT -- 5. Alternative Approaches -- 6. The Ontological Significance of QFT and AQFT -- Part II. Classical Ontologies -- 7. Classical vs. Revisionary Ontologies -- 8. Particle Interpretation of QFT -- 9. Field Interpretations of QFT -- Part III. Revisionary Ontologies -- 10. Process Ontology -- 11. Trope Ontology I: The Ontological -- 12. Trope Ontology II: Properties and Things -- Part IV. The Trope Bundle Interpretation of QFT: A New Ontology for Fundamental Physics -- 13. Dispositional Trope Ontology -- Part V. Concluding Remarks -- 14. Physics and Philosophy -- 15. Summing Up -- Part VI. Appendices -- Abbreviations and Notation -- A. Special Relativity Theory: Some Notation and Required Results -- B. Ontologically Oriented Survey of Quantum Mechanics -- C. Advanced Foundational Topics in QFT -- D. Assumptions and Results of AQFT -- Bibliography -- Physics (and Mathematics) Glossary -- Philosophy Glossary -- Backmatter
Sommario/riassunto	Today, quantum field theory (QFT)-the mathematical and conceptual framework for contemporary elementary particle physics-is the best starting point for analysing the fundamental building blocks of the

material world. QFT if taken seriously in its metaphysical implications yields a picture of the world that is at variance with central classical conceptions. The core of Kuhlmann's investigation consists in the analysis of various ontological interpretations of QFT, e.g. substance ontologies as well as a process-ontological approach. Eventually, Kuhlmann proposes a dispositional trope ontology, a

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