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Titolo	Knowledge and Time / / by Hans Primas ; edited by Harald Atmanspacher
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Descrizione fisica	1 online resource (XV, 427 p. 38 illus., 10 illus. in color.)
Disciplina	530.01
Soggetti	Physics Knowledge, Theory of Probabilities Philosophy and science Cognitive psychology History and Philosophical Foundations of Physics Epistemology Probability Theory and Stochastic Processes Philosophy of Science Cognitive Psychology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I Knowledge: Introduction -- Boolean Descriptions -- Non-Boolean Descriptions -- Rationality and Creativity -- Modes of Knowing in Mathematics -- Bottom-Up Approaches in Physics -- Top-Down Approaches in Physics -- Part II Time: Matter, Mind and Time -- Temporal Groups and Algebras -- Representations of Temporal Groups and Semigroups -- Complementary Concepts of Time -- The Relevance of Sequential Time -- The Relevance of Non-Sequential Time -- Appendix A: C*- and W*-Algebras.
Sommario/riassunto	This is a unique volume by a unique scientist, which combines conceptual, formal, and engineering approaches in a way that is rarely seen. Its core is the relation between ways of learning and knowing on the one hand and different modes of time on the other. Partial Boolean logic and the associated notion of complementarity are used to express

this relation, and mathematical tools of fundamental physics are used to formalize it. Along the way many central philosophical problems are touched and addressed, above all the mind-body problem. Completed only shortly before the death of the author, the text has been edited and annotated by the author's close collaborator Harald Atmanspacher.
