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Titolo	The march of time : evolving conceptions of time in the light of scientific discoveries // Freidel Weinert
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Soggetti	Time - History Discoveries in science - History
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1 Evolving Conceptions of Time in the Light of Scientific Discoveries -- Introduction -- 2 Time and Cosmology -- Greek Astronomy -- Plato and Aristotle -- The Need for Physical Time -- Kant's Cosmology -- Time and Causality -- The Topology of Time -- The Metric of Time -- Some Advances in the Theory of Time in Classical Physics -- Time in Modern Physics -- The Measurement of Time in Quantum Mechanics -- Why Measurement? -- On Permissible Inferences from Scientific Theories -- 3 Flux and Stasis.-Parmenidean Stasis and Heraclitean Flux -- Idealism About Time -- Realism About Time -- Relationism About Time -- The Theory of Relativity and the Block Universe -- Minkowski Spacetime and the Block Universe -- An Alternative Representation of Minkowski Space-Time -- Space-Time and Invariance -- The General Theory of Relativity -- Substantivalism and Relationism About Space-Time -- 4 Symmetry and Asymmetry -- Fundamental Equations and Human Experience -- Entropy and Order -- Reversibility and Irreversibility -- The Role of Boundary Conditions -- The Emergence of Time -- Time in Basic Quantum Mechanics -- Time Travel Scenarios -- 5 Conclusion -- Bibliography -- Index.
Sommario/riassunto	The aim of this interdisciplinary study is to reconstruct the evolution of our changing conceptions of time in the light of scientific discoveries. It will adopt a new perspective and organize the material around three central themes, which run through our history of time reckoning: cosmology and regularity; stasis and flux; symmetry and asymmetry. It

is the physical criteria that humans choose – relativistic effects and time-symmetric equations or dynamic-kinematic effects and asymmetric conditions – that establish our views on the nature of time. This book will defend a dynamic rather than a static view of time.
