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Nota di contenuto	Front matter -- Contents -- Acknowledgments -- Introduction -- Chapter 1. Methodological Preliminaries -- Chapter 2. Why Write Biographies of Theoretical Entities? -- Chapter 3. Rethinking "the Discovery of the Electron" -- Chapter 4. The Birth and Infancy of the Representation of the Electron -- Chapter 5. The Genesis of the Quantum Electron -- Chapter 6. Between Relativity and Correspondence -- Chapter 7. "How the Electrons Spend Their leisure Time": The Chemists' Perspective -- Chapter 8. Forced to Spin by Uhlenbeck and Goudsmit -- Chapter 9. Identifying the Electron: Meaning Variance and the Historicity of Scientific Realism -- References -- Index
Sommario/riassunto	Both a history and a metahistory, Representing Electrons focuses on the development of various theoretical representations of electrons from the late 1890's to 1925 and the methodological problems associated with writing about unobservable scientific entities. Using the electron- or rather its representation-as a historical actor, Theodore Arabatzis illustrates the emergence and gradual consolidation of its representation in physics, its career throughout old quantum theory, and its appropriation and reinterpretation by chemists. As Arabatzis

develops this novel biographical approach, he portrays scientific representations as partly autonomous agents with lives of their own. Furthermore, he argues that the considerable variance in the representation of the electron does not undermine its stable identity or existence. Raising philosophical issues of contentious debate in the history and philosophy of science—namely, scientific realism and meaning change—Aratzis addresses the history of the electron across disciplines, integrating historical narrative with philosophical analysis in a book that will be a touchstone for historians and philosophers of science and scientists alike.

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