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Nota di contenuto	; Part I. Hermann's Background -- ; 1. A Biographical Sketch of Prof. Dr Grete Henry-Hermann (1901 – 1984) / Inge Hansen-Schaberg -- ; 2. Grete Hermann as a Philosopher / Fernando Leal -- ; 3. Understanding Hermann's Philosophy of Nature / Giulia Paparo -- ; Part II. Hermann on Quantum Mechanics -- ; 4. The Convergence of Transcendental Philosophy and Quantum Physics: Grete Henry-Hermann's 1935 Pioneering Proposal / Léna Soler -- ; 5. Carl Friedrich von Weizsäcker's 'Ortsbestimmung eines Elektrons' and its Inuence on Grete Hermann / Thomas Filk -- ; 6. 'In the No-Man's-Land Between Physics and Logic' : On the Dialectical Role of the Microscope Experiment / Mélanie Frappier -- ; 7. Challenging the Gospel: Grete Hermann on von Neumann's No-Hidden-Variables Proof / Michiel Seevinck -- ; 8. Grete Hermann's Lost Manuscript on Quantum Mechanics / Elise Crull and Guido Bacciagaluppi -- ; 9. Bohr's Slit and Hermann's Microscope / Guido Bacciagaluppi -- ; 10. Hermann and the Relative Context of Observation / Elise Crull -- ; Part III. Discussions at the Hermann Workshop -- ; 11. Panel Discussion / Dieter Krohn, Rene Saran and Fernando Leal -- ; 12. General Discussion -- ; Part IV. Translations -- ; 13. Letter from G. Heckmann to G. Hermann, 17 December 1933 / Gustav Heckmann -- ; 14. Determinism and Quantum Mechanics / Grete Hermann -- ; 15. Natural-Philosophical Foundations of Quantum Mechanics / Grete Hermann.
Sommario/riassunto	"Grete Hermann (1901-1984) was a pupil of mathematical physicist Emmy Noether, follower and co-worker of neo-Kantian philosopher Leonard Nelson, and an important intellectual figure in post-war German social democracy. She is best known for her work on the philosophy of modern physics in the 1930s, some of which emerged from intense discussions with Heisenberg and Weizsäcker in Leipzig. Hermann's aim was to counter the threat to the Kantian notion of causality coming from quantum mechanics. She also discussed in depth the question of 'hidden variables' (including the first critique of von Neumann's alleged impossibility proof) and provided an extensive analysis of Bohr's notion of complementarity. This volume includes translations of Hermann's two most important essays on this topic: one hitherto unpublished and one translated here into English for the first time. It also brings together recent scholarly contributions by historians and philosophers of science, physicists, and philosophers and educators following in Hermann's steps. Hermann's work places her in the first rank among philosophers who wrote about modern physics in the first half of the last century. Those interested in the many fields to which she contributed will find here a comprehensive discussion of her philosophy of physics that places it in the context of her wider work."-- Provided by publisher.