1. Record Nr. UNINA9910462393403321 Autore Schweber S. S (Silvan S.) Titolo Nuclear forces [[electronic resource]]: the making of the physicist Hans Bethe / / Silvan S. Schweber Cambridge, Mass., : Harvard University Press, 2012 Pubbl/distr/stampa **ISBN** 0-674-06553-0 Descrizione fisica viii, 579 p : ill Disciplina 530.092 В Soggetti Nuclear physicists - United States Atomic bomb - Moral and ethical aspects - United States Nuclear weapons - Moral and ethical aspects - United States Nuclear warfare - Moral and ethical aspects - United States Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Formerly CIP. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front matter -- Contents -- Introduction -- 1. Growing Up -- 2. Maturing -- 3. Becoming Bethe -- 4. Beyond the Doctorate: 1928-1933 -- 5. England, 1933-1935 -- 6. Hilde Levi -- 7. Cornell University --8. The Happy Thirties -- 9. Rose Ewald Bethe -- Conclusion: Past and Future -- Appendixes A. The Bethe Family Genealogy. B. Courses Taken at Frankfurt University. C. A Brief History of the Genesis of Quantum Mechanics. D. Courses Taken at Munich University. E. Bethe's Doctoral Thesis. F. The Habilitationsschrift Defense. Notes. References. Acknowledgments. Index -- Appendix A. The Bethe Family Genealogy -- Appendix B. Courses Taken at Frankfurt University -- Appendix C. A Brief History of the Genesis of Quantum Mechanics -- Appendix D. Courses Taken at Munich University -- Appendix E. Bethe's Doctoral Thesis -- Appendix F. The Habilitationsschrift Defense -- Notes --References -- Acknowledgments -- Index

Sommario/riassunto

On the fiftieth anniversary of Hiroshima, Nobel-winning physicist Hans Bethe called on his fellow scientists to stop working on weapons of mass destruction. What drove Bethe, the head of Theoretical Physics at Los Alamos during the Manhattan Project, to renounce the weaponry he

had once worked so tirelessly to create? That is one of the questions answered by Nuclear Forces, a riveting biography of Bethe's early life and development as both a scientist and a man of principle. As Silvan Schweber follows Bethe from his childhood in Germany, to laboratories in Italy and England, and on to Cornell University, he shows how these differing environments were reflected in the kind of physics Bethe produced. Many of the young quantum physicists in the 1930's, including Bethe, had Jewish roots, and Schweber considers how Liberal Judaism in Germany helps explain their remarkable contributions. A portrait emerges of a man whose strategy for staying on top of a deeply hierarchical field was to tackle only those problems he knew he could solve. Bethe's emotional maturation was shaped by his father and by two women of Jewish background: his overly possessive mother and his wife, who would later serve as an ethical touchstone during the turbulent years he spent designing nuclear bombs. Situating Bethe in the context of the various communities where he worked, Schweber provides a full picture of prewar developments in physics that changed the modern world, and of a scientist shaped by the unprecedented moral dilemmas those developments in turn created.