Record Nr. UNINA9910823644503321 Autore Hoddeson Lillian Titolo Fermilab: physics, the frontier, and megascience / / Lillian Hoddeson, Adrienne W. Kolb, and Catherine Westfall Chicago,: University of Chicago Press, 2008 Pubbl/distr/stampa **ISBN** 1-282-23966-X 9786612239663 0-226-34625-0 Edizione [1st ed.] Descrizione fisica 1 online resource (515 p.) Classificazione **UB 2450** Altri autori (Persone) KolbAdrienne W WestfallCatherine Disciplina 539.7/30973 Soggetti Particle accelerators - Research - United States Particles (Nuclear physics) - Research - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references (p. 443-469) and index. Nota di bibliografia Nota di contenuto The call of the frontier -- An American dream -- The several hundred GeV accelerator, 1959-1963 -- The Berkeley design, 1963-1965 --Midwest passage, 1965-1967 -- A new frontier on the Illinois prairie -- Wilson's vision -- Constructing the ring, 1968-1972 -- A user's paradise, 1968-1978 -- Beyond the horizon: the energy doubler, 1967-1978 -- The road to megascience -- Lederman's vision --Completing the doubler, 1978-1984 -- Bigger science: experiment strings, 1970-1988 -- Megascience realized : colliding beams, 1967-1989 -- The super collider affair -- Epilogue: Light on the horizon, 1989-1995 -- Authors' statements and other acknowledgements --Appendix: Fermilab experiments, 1970-1992. Fermi National Accelerator Laboratory, located in the western suburbs Sommario/riassunto of Chicago, has stood at the frontier of high-energy physics for forty years. Fermilab is the first history of this laboratory and of its powerful accelerators told from the point of view of the people who built and used them for scientific discovery. Focusing on the first two decades of research at Fermilab, during the tenure of the laboratory's charismatic

first two directors, Robert R. Wilson and Leon M. Lederman, the book traces the rise of what they call "megascience," the collaborative

struggle to conduct large-scale international experiments in a climate of limited federal funding. In the midst of this new climate, Fermilab illuminates the growth of the modern research laboratory during the Cold War and captures the drama of human exploration at the cutting edge of science.