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Fermilab: The Ring of the Frontier, 1967-1989

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Fermilab, the home of the highest energy hadron accelerator in the world, has been at the frontier of high energy physics for almost forty years. Between 1967, when the Lab was founded in a suburb of Chicago by Robert R. Wilson, Edwin L. Goldwasser, and Norman F. Ramsey, and 1989, the final year of Leon M. Lederman's administration, Fermilab was the premiere proton facility for experimental particle physics in the US. Wilson's era saw the construction and achievement of the 200-500 billion electron volts (BeV) Main Ring. Lederman led Fermilab into the next frontier with the superconducting Energy Doubler/Saver, renamed the Tevatron for its design energy of one trillion electron volts (TeV). In the 1980s-1990s, as construction of facilities became more complex and experiments grew larger and took a generation to complete, how could the costs be met without even more careful long-term planning and budgeting? Why did Fermilab's accelerator complex advance while others did not? What role, if any, did politics play? What can be learned from Fermilab's experience about maintaining US involvement at the forefront of 21st century particle physics research?