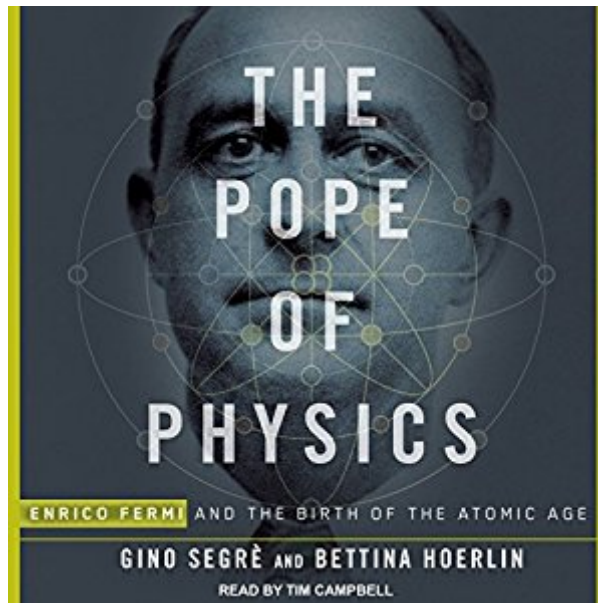




The book was found

# The Pope Of Physics: Enrico Fermi And The Birth Of The Atomic Age



## Synopsis

Enrico Fermi is unquestionably among the greats of the world's physicists, the most famous Italian scientist since Galileo. Called "the Pope" by his peers, he was regarded as infallible in his instincts and research. His discoveries changed our world; they led to weapons of mass destruction and conversely to life-saving medical interventions. This unassuming man struggled with issues relevant today, such as the threat of nuclear annihilation and the relationship of science to politics. Fleeing Fascism and anti-Semitism, Fermi became a leading figure in America's most secret project: building the atomic bomb. The last physicist who mastered all branches of the discipline, Fermi was a rare mixture of theorist and experimentalist. His rich legacy encompasses key advances in fields as diverse as cosmic rays, nuclear technology, and early computers. In their revealing book, *The Pope of Physics*, Gino Segrè and Bettina Hoerlin bring this scientific visionary to life. An examination of the human dramas that touched Fermi's life as well as a thrilling history of scientific innovation in the 20th century, this is the comprehensive biography that Fermi deserves.

## Book Information

Audible Audio Edition

Listening Length: 10 hours and 39 minutes

Program Type: Audiobook

Version: Unabridged

Publisher: Tantor Audio

Audible.com Release Date: February 14, 2017

Whispersync for Voice: Ready

Language: English

ASIN: B01N4TJLZN

Best Sellers Rank: #15 in Books > Christian Books & Bibles > Biographies > Popes & the Vatican #27 in Books > Science & Math > Physics > Nuclear Physics #156 in Books > Biographies & Memoirs > Professionals & Academics > Scientists

## Customer Reviews

I don't think anyone including the authors would claim that *The Pope of Physics* is great literature. It isn't, but it is well written, easy to read and extraordinarily interesting. Enrico Fermi was one of the great men of physics during the 20th century. His friends and coworker gave him the nickname of the Pope because when it came to physics, his pronouncements were infallible. Fermi ranks right up there with Albert Einstein, Niels Bohr and

Marie Curie. Fermi was awarded the Nobel Prize for physics in 1938. He immigrated to the United States from Italy later that same year. Because his wife was Jewish, their children would also have been classified as Jewish. It was not safe for Fermi and his family to remain in Italy after the alliance with Germany became a fait accompli. When Fermi first came to America, he became a physics professor at Columbia. A few years later in 1942, Fermi led a team of scientists that developed the first successful nuclear reactor. The reactor went critical on December 2, 1942. It was the first self-sustaining controlled nuclear reaction ever. Fermi's contributions to the Manhattan Project were invaluable. He was one of the few physicists that excelled both theoretically and experimentally. He did not shrink from hard work or literally getting his hands dirty. Fermi led by example both at the chalkboard and in the lab. As a young man back in the 1960s, I served aboard the U.S. Navy's FBM (Fleet Ballistic Missile) submarines. Each sub carried sixteen Polaris missiles. Each of the missiles was armed with a thermonuclear weapon, much more powerful than those dropped on Hiroshima and Nagasaki. The subs were also armed with the latest and most effective torpedoes. Some were nuclear tipped. At the time, these submarines were the most deadly weapons systems on earth. With only a few minutes notice, we could launch our missiles from the oceans depths, without fear of detection. That is an example of the destructive side of nuclear power. These weapon systems served the country well for many years as a deterrent against potential surprise attacks. Thankfully, we never had to launch our missiles or fire our torpedoes. But there is another side to nuclear power, a peaceful side. The subs were powered by nuclear reactors. Basically, the reactors are a source of heat. Without going into too much detail, the heat from the reactor (and there was a lot of it) is used to generate steam. The subs are actually propelled by steam turbines, which is why a nuclear sub can remain submerged almost indefinitely or at least until the food runs out. There was no need to surface to take on fuel. We could make our own oxygen and drinking water while submerged, but not food. In the U.S. today, about twenty percent of our electrical power comes from nuclear power. In France, that number is almost 75 percent. Nuclear power, when properly designed, sited and operated is safe, efficient and clean. There are no greenhouse gases. Enrico Fermi not only helped design "the bomb." He is also one of the fathers nuclear energy for peace. After the war, Fermi accepted a teaching position at the University of Chicago. Six of his students went on to win the Nobel Prize. Also, one of his Italian students went on to become a Nobel laureate. That is quite a record. R.I.P. Enrico Fermi.

Great Book! loved the stories and the deep insides on what was going on. The historical

perspectives were great and the technical accuracy is excellent. Very enjoyable for anyone interested in science and technology and also in what was happening in Europe and USA in the mid 30's and through post-war times. Fascinating read and I finished the book with great admiration for Fermi and others who with great intuition, solid theoretical knowledge and ingenuity on the experimental side made great discoveries.

I completed training to become a radiographer some time ago. The physics portion included many of the molecular/atomic exchanges that occurred when x-ray images are taken. The lessons provided depth and insight to the actions consequent to the mere touch of the exposure button on the x-ray tube; truly fascinating. "The Pope of Physics" transcended this amazement by bringing to life the discoverers of said reactions. The book enables a time travel to the formative years of numerous physics building blocks. Sengre breathes life into the marvel of it all. One feels present as the scientists discuss their theories and experiments. What a great read!

It brings me back to my days at the University of Chicago. At the university ALL professors are required to teach beginners courses. Fermi was teaching first year physics the year before I became a freshman. I did have Anderson, one of his associates, when I took physics. Harold C Urey taught my wife first year chemistry. They were GREAT teachers. The stories in the book discuss most of Fermi's associates, and although I thought I knew about the building of the pile in the west stands, the book corrected many of my misconceptions.

Well written and interesting- could have provided a shade more technical detail. Good nevertheless- much like another book on this subject that emphasized Robert Oppenheimer

Good book for anyone with an interest in the history of nuclear physics and the "founding fathers" of nuclear energy and weapons. Some understanding of nuclear physics is helpful, but not essential in enjoying this book. If you are looking for scientific details and equations, look elsewhere. This book is about Enrico Fermi's life, and the people that influenced him. I found it an excellent read, and highly recommend it.

I know a little about the history of modern physics, but this biography added a great deal to my knowledge. Fermi was a very unusual and brilliant scientist. As this very readable book documents, he contributed a great deal to atomic physics in the period 1930-1950. He built the first functional

atomic reactor, which was essential to production of the plutonium atomic bomb. He was a rare combination of a skilled experimental and productive theoretical physicist. He invented the idea of aggressive approximation, which was then applied to "Fermi problems". The basic idea was that for many questions a very rough answer is sufficient. If the approximate answer shows that a theory is wrong, that is all that is required. If the approximate answer shows that a theory might be correct, it will generate the motivation to calculate a more accurate answer. This biography reveals much about the personality of a very focused man. I was a fellow graduate student with his younger son. I wish I had read this biography then so I could have ask so many questions. If you like physics, you will love this book.

This is a great book. It covers the life of Enrico Fermi with more detail than I had ever read before. The best part of the book was learning about Fermi the man rather than just his scientific accomplishments with which I was familiar. It also pointed out the need for a benefactor in Italy at that time in Italian science which I did not know. An excellent read. Loved it.

[Download to continue reading...](#)

The Pope of Physics: Enrico Fermi and the Birth of the Atomic Age Enrico Fermi: And the Revolutions of Modern Physics (Oxford Portraits in Science) Neutron Physics for Nuclear Reactors: Unpublished Writings by Enrico Fermi Atoms in the Family: My Life with Enrico Fermi Chaos in Atomic Physics (Cambridge Monographs on Atomic, Molecular and Chemical Physics) Racing for the Bomb: The True Story of General Leslie R. Groves, the Man Behind the Birth of the Atomic Age The Political Pope: How Pope Francis Is Delighting the Liberal Left and Abandoning Conservatives Pope Francis: The Last Pope?: Money, Masons and Occultism in the Decline of the Catholic Church All the Pope's Saints: The Jesuits Who Shaped Pope Francis The Pope's Last Crusade: How an American Jesuit Helped Pope Pius XI's Campaign to Stop Hitler The Atomic Sea: Part Seven: The Atomic Jungle Atomic and Molecular Radiation Physics (Wiley Monographs on Chemical Physics) Fundamental Aspects of Plasma Chemical Physics: Transport (Springer Series on Atomic, Optical, and Plasma Physics) Atomic Physics (Oxford Master Series in Physics) Bose, Spin and Fermi Systems: Problems and Solutions Raising Multiple Birth Children: A Parent's Survival Guide, Birth-Age 3 Swan Sinks: SS Cygnet Sunk by Italian Submarine Enrico Tazzoli San Salvador Bahamas in World War II (U-Boats in the Bahamas Book 2) The Great Tenors: The Best Of...(Mario Del Monaco, Tito Schipa, Beniamino Gigli, Luciano Pavarotti, Jose Carreras, Placido Domingo, Enrico Caruso, Gino Bechi, Ferruccio Tagliavini, Franco Corelli, Guisepppe Di Stephano) [Sheet Music] Quantum Entanglement in Electron Optics: Generation, Characterization, and Applications

(Springer Series on Atomic, Optical, and Plasma Physics) The Pope and the Professor: Pius IX, Ignaz von Dollinger, and the Quandary of the Modern Age

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)