Louis De Broglie
Biography

Louis De Broglie was born August 15, 1892 in Dieppe, France, his date of death is March 19, 1987 in Louveciennes, France at the age of 94.

Family Life
• De Broglie was born into French Nobility. He was the brother of Maurice De Broglie who was also a physicist. After the death of his older brother Louis De Broglie became the 7th duc(duke) de Broglie.
• The De Broglie family is one of the more illustrious families of France.

Bumps
• At first De Broglie studied literary studies at the Sorbonne in Paris and graduated with a degree in history in 1910 at the age of 18.
• When first enrolled to Sorbonne De Broglie had no definitive plan for a career.
• As his interest in mathematics and physics increased he went back to school and graduated with a degree in 1913.
• Before he was able to further his education World War I broke out and De Broglie went to serve in Paris.

Service During World War I & II
• Louis De Broglie served during World War 1 in the wireless telegraphy section of the army.
• He was stationed in Paris, France in the Eiffel Tower. He devoted his spare time to studying and thinking about technical problems.
• After the war De Broglie resumed his studies of general physics.
• He did not serve in World War II due to his age but he still became an advisor to the French Atomic Energy Commissariat.

Quantum approach
• De Broglie presented his thesis entitled "Researches on Quantum Theory" in 1924 at the age of 32.
• His thesis contained the idea of matter waves and wave particle duality.

Quantum Ideas Substantiated
• Louis De Broglie did not actually conduct an experiment to prove that all particles exhibit wave like properties
• He theorized that all particles that exist also exhibit wavelike properties based on research that he had conducted and that was strongly based in the theories of Einstein
• Erwin Schrodinger used De Broglie’s wave equation to develop his own theory
• De Broglies theory was proved by 2 american physicists, Clinton Davisson and Lester Germer. Their experiment consisted of beaming electrons at varying levels of energy at the crystal lattice of a nickel.
• De Broglie’s ideas were substantiated 3 years after he proposed his quantum theory in 1924

Nobel Prize
• Louis De Broglie won the Nobel prize for his discovery of the wave nature of electrons in 1929.
• De Broglie was the first scientist to win the Nobel prize with his graduate thesis.