

Classical Physics Timeline: 1589 - 1899

- 1589 - Pisa University mathematics instructor Galileo Galilei studies the motion of objects and begins to write his unfinished book - *On Motion*
- 1602 - Galileo observes that the period of a swinging pendulum is independent of the amplitude of the swinging pendulum
- 1609 - Galileo makes his first telescope
- 1632 - Galileo publishes *Dialogue concerning the two greatest world systems*, which argues convincingly for the Copernican view that the Earth and planets revolve around the Sun
- 1665 - Isaac Newton begins study of calculus
- 1684 - Leibniz publishes the beginning of his work on differential and integral calculus.
- 1687 - Newton publishes *Principia Mechanica*
- 1738 - Daniel Bernoulli writes *Hydrodynamics*
- 1770 - Hyperbolic trigonometry is developed
- 1772 - Henry Cavendish discovers that the electrostatic force is described by an inverse square law similar to gravity
- 1789 - Charles-Augustin de Coulomb recreates Cavendish's experiment
- 1799 - Pierre-Simon Laplace publishes *Treatise on Celestial Mechanics*
- 1807 - Jean Baptiste Joseph Fourier writes *On the Propagation of Heat in Solid Bodies*.
- 1820 - Danish physicist Hans Christian Oersted shows that an electric current in a wire can move the magnetic needle of a compass, suggesting electricity and magnetism are related
- 1826 - Andre Marie Ampere develops Ampere's Law, showing the magnetic force between two parallel wires with electric current
- 1827 - Frederich Ohm publishes Ohm's Law of electrical resistance
- 1831 - Michael Faraday discovers magnetic induction, now known as Faraday's Law
- 1842 - Austrian mathematician and physicist Christian Doppler publishes his work on the Doppler Effect
- 1873 - James Clerk Maxwell publishes a set of equations from which all of the observed laws of electromagnetism can be derived through mathematics
- 1884 - Heinrich Hertz creates the first radio waves
- 1884 - Ludwig Boltzmann makes a theoretical derivation of black body radiation using Maxwell's equations and thermodynamics
- 1895 - Wilhelm Rontgen discovers X-rays and gamma radiation
- 1897 - Electron discovered by J.J. Thompson