

Galileo Galilei began studying medicine to become a doctor during the late 16th century. He was then employed as a tutor for the Medici family and taught the children a technical form of education. In 1610, he was appointed as the Royal Professor of mathematics and philosophy, and his prominence within the Medici family grew. The Medici offered him protection from those who were against his controversial scientific beliefs. In return, Galileo would swear to return to the Medici court first when making a new discovery. He discovered buoyancy and turned it into a spectacle to witness. He is also known for his curiosity about whether or not two balls of different weights would fall at the same rate. He tested this theory by dropping 2 different balls from the top of the Tower of Pisa. His discoveries were a precursor to Sir Isaac Newton's theories on gravity.

He was by far a scientist ahead of his time, especially with his discoveries within astronomy. He invented the first astronomical telescope, and would look into it each night and draw everything he observed. This is how he learned about the phases of the moon. He was also the first to discover the Milky Way, sunspots, and Jupiter's moons. The bodies that orbited Jupiter were called the "Medici Stars." The Medici's sponsorship of his practices immensely assisted in his fame, and vice versa.

However, Galileo knew his theories were in danger of religious persecution. One of his friends, Bruno, was a fellow scientist and Dominican friar who was tried and burned alive for his beliefs. Individual thought, especially Galileo's theory that the sun was the center of the universe, was thought of as heresy and was not tolerated by the Church. Knowing this, Galileo thought of an alternative way to publish the theory that the Earth revolved around the sun. He wrote a philosophical comedy entitled "Dialogue on the Two World Systems" that used fictional

characters and humor to introduce his hypothesis. It was checked for heresy by the church and approved, but after its publication went viral, Pope Urban ordered another investigation.

This time, Galileo was in fact prosecuted for his anti-church beliefs due to the fact that his scientific theory opposed the idea that the Church was supposed to be the only source of truth. In 1633, Galileo was tried by the inquisition of Rome, where he was tortured to confess. Grand duke Ferdinando II attempted to protect Galileo, as the Medici had done for years, but unfortunately he couldn't continue supporting such a radical thinker and was forced to stop paying for Galileo's expenses in order to please the Pope and the papacy. On June 22, 1635, Galileo surrendered to the church and was sent on house arrest where he would later die. The Medici planned an extravagant public funeral for the brilliant scientist, but the church overruled and prohibited it. Galileo was such an influential intellect for the time, spreading as far as Shakespeare's theater. He was one of the prominent leaders for individual thinking and the Scientific Revolution in Europe.