# Galileo galilei: life and achievements

Literature, Biography



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## My Life

I am Galileo Galilei, and I am an Italian. I am born in the year 1564, 15th of February in Pisa, Duchy of Florence, Italy. My mother is Giulia and my father is Vincenzo Galilei who he is a famous lutenist, composer and a music theorist. I am the first of six children in my family, where only three of my siblings survived infancy. In the year 1572, which I was 8 years old, my family moved to Florence, where I was left Jacopo Borghini for two years and also not long after that I attended the monastery school at Vallombrosa, near Florence. However, due to the influences from my family, I too became an accomplished lutenist myself, being taught by my father since young. I am much grateful for my family, as my parents had made many sacrifices to have me educated just to fulfil my potential and talent that they saw in me, as we are a poor family, but nevertheless a noble family. At my father's insistence, in 1580, I enrolled and studied a more profitable career, which is Medicine, in the University of Pisa. During this time, I developed and I find myself most fascinated by many subjects, varying from wide range of different kinds of subject, where I grow to be very critical on Aristotle's

teachings and ideas, where I find often conflicting to my agreement or belief. Mathematics have grown to be a part of me, where I find myself very enamoured of the subject which I had decided to take mathematics and philosophy as my profession, even if it's against my father's will. In 1585, I left the university without obtaining the degree, and for several years, I gave private mathematic subject lessons in Florence and Siena. However, I did not plan to settle there, I tried to apply for the chair of mathematics at University of Bologna, but result was disappointing. A year later, in 1589, I was appointed to be the chair of mathematics at University of Pisa but my strident criticism on Aristotle's teaching and idea caused myself to be isolated by my colleagues. It had been a tough 3 years, therefore I resigned and went to the University of Padua to be the University's chair of mathematics, which also gave me the opportunity to performed experiments with falling bodies for my scientific studies.

# **My Achievements**

As for my achievement, I would like to separate it into 3 different aspect of achievement. First of all, it is my achievements in the Astronomy field. In 1609, based on an uncertain description of the first practical telescope, I was able to develop a telescope that is 3 times the magnification of the first practical telescope and then improving with to 30 times magnification, later being known as Galilean Telescope. In 1605, I was brought to notice that there is a less bright nova occurrence in 1601 compared to the supernova in 1572. Thus, such finding disapproved the Aristotelian beliefs in the immutability of the heavens. On 7 January 1610, I observed and saw 3 fixed stars, totally invisible due to their size, settling nearby Jupiter in a straight

line, changing ways. After many nights of my observations, On 10 January, one missing star, allows me to conclude that the stars are orbiting Jupiter, it is the discovery of the Four Main Jupiter's moon. 1610 September, I observed and discovered the phases of Venus, Neptune in 1612 and Saturn in 1616. 1632, credited with discovery of lunar liberation in latitude, deduced moon is not a flat surface but mountains and crater, conflicting Aristotle claims. In Physics field, my motion studies of bodies are the foundation of Classical Mechanics by Sir Isaac Newton. I too was credited for being one of the first to understand sound frequency, as well as putting forward the basic principle of relativity, which is the central of Einstein's special theory of relativity and providing basic framework for Newton's law of motion. As for Mathematics field, my application of mathematics on experimental physics proves innovative.

### The Importance of Effort

It is never easy to achieve great achievements, and it certainly does not come at an easy cost. Talent is never enough, effort is the driving force to bring you where u want to be and who you want to be. I have struggled with many restless nights to prove of what I believe and what I stand for, with the little ambition of trying to make the world a better place with my efforts. It may not be the most accurate, or the truest answer, but the hope to use my work to inspire the others to correct my mistakes and improved those which is not enough, the willingness to learn, try and be curios about the truth.

#### Reference

- 1. https://www. britannica. com/biography/Galileo-Galilei/Telescopic-discoveries
- 2. https://en. wikipedia. org/wiki/Galileo\_Galilei#Scientific\_contributions
- 3. https://www.biographyonline.net/scientists/galileo.html
- 4. https://www. history. com/topics/inventions/galileo-galilei
- 5. https://www. youtube. com/watch? v= 5eMYZCnNALc
- 6. https://iopscience. iop. org/article/10. 1086/316493
- 7. https://en. wikipedia. org/wiki/Sunspot
- 8. https://en. wikipedia. org/wiki/Kepler%27s Supernova
- 9. https://en. wikipedia. org/wiki/Parallax#Diurnal parallax
- https://starchild.gsfc. nasa.
  gov/docs/StarChild/whos\_who\_level2/galileo. html
- 11. https://www-history.mcs. st-and. ac. uk/Biographies/Galileo. html