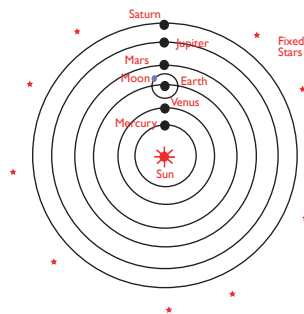
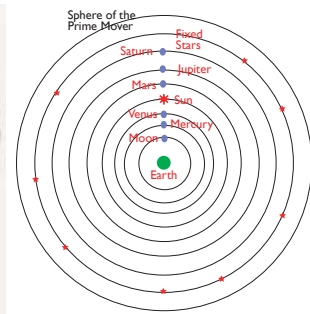
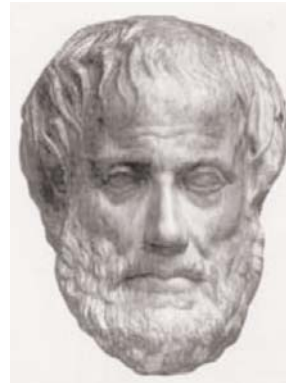


NICOLAUS COPERNICUS



Copernicus's Universe



Aristotle's Universe

Nicolaus Copernicus (1473 – 1543)

Nicolaus Copernicus was born at Thorn in Poland on 19 February 1473. He was a Polish church official whose passion was astronomy, and who observed the sky closely. Based on his observations, Copernicus proposed an alternative theory about the Solar System from that which was believed at the time. He proposed that the Earth was a planet orbiting the Sun and that all planets moved in circles, one inside the other.

At the time Copernicus lived, the beliefs about the Solar System came from a Greek philosopher called Aristotle who lived around 335 BC. Aristotle said that the Earth was situated at the centre of the Universe, and all the other bodies (the Sun and all the other planets) rotated in a circle around it. This theory was accepted by society and in particular the Church - it had been 'Christianised' and become part of the religious beliefs of the people.

Nicolaus Copernicus developed Aristotle's ideas, thinking that if the Earth was a planet and, like all the planets, moved in circles, it would explain their positions in the sky which he had observed. He believed that this would also make it easier to estimate their distances from the Sun.

Copernicus was cautious in announcing his theory because it would deny the current thinking at the time, but also because he could not fully explain the movements of the planets. As an official of the church, Copernicus had to follow strict rules, so he was afraid to voice his ideas. He only dared publish his view of the Universe at the end of his life in 1543. His ideas were forgotten for about 100 years after his death, until the 17th century.

Kepler, Galileo and Newton would build on Copernicus' theory and provide the evidence that would sweep away the ideas of Aristotle and replace them with the modern view of astronomy and natural science.