

# The Moon's surface revealed

Galileo's *Sidereus nuncius*, or 'Starry Messenger', was written soon after the telescope was invented in 1608. In this treatise, he described his stunning discoveries: the craters and mountains on the Moon's surface, and the existence of moons orbiting Jupiter.

Our copy is a later three-in-one reprint of major astronomical works, handy for the seventeenth-century student.

Pierre Gassendi, *Institutio astronomica*, Johannes Kepler *Dioptrice*, Galileo Galilei *Sidereus nuncius*. London, 1653. BT3.192.6



## A landmark work of astronomy

The publication of this book was a seminal moment in our understanding of the universe. Its author, Copernicus, was the first person to propose the heliocentric model of our solar system, with the Earth orbiting the Sun.

At the time, it was widely believed that the Sun orbited the Earth. The book would later be placed on the Catholic Church's 'List of Prohibited Books' for contradicting Christian doctrine.

> Nicolaus Copernicus, De Revolutionibus orbium coelestium. Basel, 1566. BT1.36.11(1)

#### Competing theories of the solar system

This book proposed a new theory of the solar system which provided a compromise between Copernicus's heliocentric model and the traditional Earth-centric one.

It also features detailed maps of the moon, including what the author named *Mare Tranquillitatis* ('Sea of Tranquillity'). This would later be the landing site of the Apollo 11 mission and location of their famous 'one small step for man'.

## Giovanni Battista Riccioli, *Almagestum novum*. Bologna, 1653. BT3.154.9



The book's frontispiece presents a visual allegory of these competing theories of the solar system. Urania, the Muse of Astronomy, balances the Copernican system and Riccioli's new model, finding the latter weightier. The old Earth-centric system lies rejected on the ground in the right-hand corner.



Our copy is particularly significant because it contains a very rare engraving of an eclipse in Oxford in 1654. This was drawn by Richard Rawlinson, who watched the eclipse with the young Christopher Wren. Rawlinson gave a few of these engravings to friends. An early owner of this book acquired one and pasted it in, ensuring its survival.



### A 400-year-old lecture series

This book preserves Henry Savile's final lecture series. Savile was an extraordinary scholar who oversaw the completion of the Bodleian Library and served as Greek tutor to Elizabeth I.

He also set up two professorships in 1619, announcing them in these lectures with the closing instruction *valete et studete* ('farewell, and get to work!'). There are still Savilian Professors in Astronomy and Geometry at New College, 400 years later.

Henry Savile, Praelectiones tresdecim in principium Elementorum Euclidis. Oxford, 1621. BT3.179.16(1)



## Galilean sunspots and a flying penis

Unlike many scholarly works at the time, Galileo wrote this in his native language. Writing in Italian, rather than Latin, enabled many more people in his home country to read his research.

This copy reached an academic audience at New College, where it produced an unusually creative response. An early student has pencilled in the startling new constellation *Penis Volans* ('Flying Penis'), allegedly 'discovered by Nostradamus around the year 1563'!

Galileo Galilei, Istoria e dimostrazioni intorno alle macchie solari e loro accidenti. Rome, 1613. BT3.181.4(2)



#### A codebreaker's history of algebra

John Wallis arrived at the University of Cambridge intending to be a doctor, but instead became gripped by the study of mathematics. He was later recruited by Oliver Cromwell as a codebreaker during the English Civil War.

He went on to write mathematical treatises, including this one, the first attempt to publish the full history of algebra. It also contains the first use of the infinity symbol  $\infty$ , and the first printed account of the young Isaac Newton's achievements.

John Wallis, A treatise of algebra, both historical and practical. London, 1685. BT3.188.7