



Dear members

Happy Christmas and here's hoping for an interesting and fun New Year. I look forward to seeing some of you at the Christmas Lunch. If you're thinking of something new to do next year, then why not join or set up a special interest group. You can find a full list of existing groups on our website and if you have an interest that you would like to pursue that's not on our list, do talk to Jo, our groups coordinator.

Liz Ouldrige (Chair)

Important dates

December 19th Monthly coffee morning for all at 'The Hayloft' Mole Avon Country Store from 10:30am.

December 20th Christmas Lunch at the Waie Inn. See the flyer or website for more details.

January 16th Monthly coffee morning for all at 'The Hayloft' Mole Avon Country Store from 10:30am.

January 17th Open Meeting at the Boniface Centre: Ian Gasper 'Refugees and Asylum Seekers in the UK'. Refreshments from 9:30am, the talk starts at 10:15am

News from the Groups

The History Group and the Historic Visits Group will probably merge in the new year. We are looking for several people to help run this new group. Please contact Jo Penning, Keith Barker or Tony Gale if you can help. There is a new dance group. It's starting on the 18th December at the Elephant on the Green at 10:30. All are welcome, no skills necessary. Please contact Jo again if you want more information.

November's talk by Professor Peter Edwards: 'The life & Times of Galileo (with tourist diversions)'

Professor Edwards gave us an interesting talk on the life of Galileo, interspersed with pictures of the important places in Galileo's life.

Galileo was born in 1564, the same year as Shakespeare – and also the year of Michaelangelo's death, probably in Ammannati House, Pisa. His father was a lutenist & music theorist and his mother was of aristocratic stock. At age 10 the family moved from Pisa to Florence where Galileo received his early education from the monks of Valemposa Abbey. In 1581 he moved back to Pisa to study medicine (at his father's urging). He gradually lost enthusiasm for the subject instead becoming interested in mathematics & opted to specialise in mathematical subjects & philosophy. In 1583, at the age of 19, Galileo discovered the isochronic nature of the pendulum & went on to develop the law of the pendulum. In 1586 he ended his university education without a degree, but the circulation of his ideas among mathematical groups had enhanced his reputation and he was appointed to the chair of mathematics at Pisa university in 1589. Galileo never married but fathered three children, two daughters & a son, with his mistress, Marina Gamba.

It is said (and this is almost certainly apocryphal), that Galileo dropped two spheres of different masses from the tower to prove his theory whereby all objects fall at the same rate in a vacuum. Aristotle had said that heavier objects fall faster than lighter ones. Contradicting Aristotle was considered heresy and in 1542 Galileo was not invited back to Pisa University as a result. In 1592 he was appointed to the chair of mathematics in Padua where Copernicus had studied astrology almost 100 years earlier.

In 1606 Galileo had invented the geometric & military compass. His research on motion had determined that the distance fallen by a body is proportional to the square of the elapsed time (the law of falling bodies) and that the trajectory of a projectile is a parabola, both were conclusions that contradicted Aristotelian physics. During this time, Galileo was made aware of the development of the telescope in Holland and constructed his own instrument, the astronomical telescope. From 1609/1610 he made a series of discoveries he described in Sidereus Nuncius or starry messenger. These included the Mountains of the Moon, revealed the existence of a multitude of stars and described the four moons of Jupiter. This was the first work anywhere describing observations made through a telescope.

In 1610 he became Chief Mathematician of the University of Pisa and Mathematician & Philosopher to the Grand Duke of Tuscani. He had no teaching duties so could concentrate his thoughts on research. During his years in Pisa and earlier in Padua he acknowledged the Medici family as his patrons and favoured them by naming planetary features after them. From 1610 Galileo observed with his telescope that Venus showed phases, despite remaining near the Sun in Earth's sky. This proved that it orbits the Sun and not Earth, as predicted by Copernicus's heliocentric model and disproved the then conventional geocentric model.

In 1616 the Inquisition declared heliocentrism to be 'formally heretical'. Galileo went on to propose a theory of tides in 1616, and of comets in 1619; he argued that the tides were evidence for the motion of the Earth. In 1632 Galileo published his 'Dialogue Concerning the Two Chief World Systems', which defended heliocentrism, and was immensely popular. Responding to mounting controversy over theology, astronomy and philosophy, the Roman Inquisition tried Galileo in 1633, found him 'vehemently suspect of heresy', and he was sentenced to house arrest where he remained until his death in 1642 having been forced to recant his theory that the earth moves around the sun. Heliocentric books were banned and Galileo was ordered to abstain from holding, teaching or defending heliocentric ideas.

In 1979 Pope John Paul II set up a committee of enquiry that reported in 1992 conceding that Galileo had been right and saying that the Inquisition had 'acted in good faith but was wrong'.

