

Biographical Encyclopedia of Astronomers

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Campanus of Novara

Born Novara, (Italy), first quarter of the 13th century

Died in Viterbo, Italy, 1296

His contemporaries, like Roger Bacon, considered Campanus one of the greatest mathematicians of his time. His birthdate can be tentatively placed between 1210 and 1230 because the first entry in some tables ascribed to him is 1232, and many of his works are dated between 1255 and 1260. Many documents confirm Campanus' birthplace: Novara in northern Italy, 40 km from Milan. He is sometimes called Johannes (John), but this first name seems to have been introduced only in the 16th century

We do not know anything of Campanus's life until 1263 when he was chaplain to Cardinal Ottobono Fieschi, later Pope Adrian V. In 1264, Campanus was chaplain to Pope Urban IV, and he remained a member of the papal court for 30 years until his death in 1296. There, Campanus served as mathematician, astronomer, astrologer, and physicist, and he met other outstanding intellectuals such as the translator William of Moerbeke, Witelo (author of the first treatise on optics), and Simon of Genoa (author of a famous medical dictionary).

At the time of his death, Campanus was a rich man, owner of many prebends in Italy, France, Spain, and England, and many buildings in Viterbo, the site of the papal court at the end of the 13th century

Campanus's fame is mainly related to a Latin edition of Euclid's *Elements* in 15 books, which was the standard Euclid for 200 years and the first printed version in 1482, and to the *Theorica Planetarum*. Probably a rearrangement of some Arabic work, the main purpose of this work is to describe the construction of an instrument for finding the position of the celestial bodies, generally called an equatorium. Campanus gives not only a description of the Ptolemaic solar, lunar, and planetary models on which the instrument is based, but also the dimensions of each model, with all its constituent parts, both relative to itself and absolute. The *Theorica* proved to be an early example of how speculation and instrumentation worked together. It was very successful; it is preserved in more than 60 manuscripts, many with illustrations and movable parts. Abbreviated versions were also prepared by later astronomers such as John of Lignères in the 14th century and John of Gmunden in the 15th century.

Other astronomical works ascribed to Campanus are as follows:

- the adaptation of the Toledan tables to the meridian of his own town, Novara;
- a treatise on the Computus, a typical form of literature on the calendar, of which he prepared two versions, a long (*maius*) and a short (*abbreviatus*);
- a *Tractatus sphaera*, an introduction to spherical astronomy;
- a summary of the contents of Ptolemy's *Almagest*, the *Almagestum parvum*;
- a treatise on the quadrant, where he demonstrated more interest in the theoretical part than in the construction and practical usage of this instrument

Campanus was also famous as an astrologer. He wrote a treatise on this subject, and a famous method of dividing astrological houses to cast horoscopes was attributed to him.

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