



by Clifford J. Cunningham

Simon Marius and the Satellites of Jupiter

It took four hundred years, but Marius has finally been cleared of plagiarism.

Seven years ago in this column (“Who Discovered Jupiter’s Satellites?” Spring, 2007), I mentioned that Simon Marius (1573-1624) was a close rival to Galileo when it came to finding the four large satellites of Jupiter. As the court mathematician in Ansbach (part of Bavaria since 1806), Marius began making observations with a telescope in 1609, and on January 8, 1610, he spotted Jupiter’s satellites. This was just one day after Galileo discovered them!

Unlike Galileo, Marius did not rush into print but first published his “discoveries” in 1614 in his magnum opus, *Mundus lovialis*. (In those days of Latin texts the letter “I” was used instead of “J”). This year marks the 400th anniversary of that publication, and the astronomical community of 2014 is taking notice.

On February 18, the 400th anniversary of the signing of the dedication in the *Mundus lovialis*, the [Simon Marius Portal](#) was officially launched. The Nürnberger Astronomische Gesellschaft (Nürnberger Astronomical Society) set up the 24-language Portal, which brings together all the electronic sources of his work as well as the secondary literature.

The high point of the year’s Marius events will be a conference on his life and work at the Nicolaus Copernicus Planetarium in Nürnberg on September 20. The proceedings will eventually be published in a book. And one of the principal goals of the “Simon Marius Anniversary” has been achieved: the committee of the International

Astronomical Union (IAU) responsible for the naming of minor planets has announced that the asteroid 1980 SM, located in the main belt between Mars and Jupiter, will be known as (7984) Marius.

So, why all the fuss about this 400-year-old book? In it, Marius claimed to have found the satellites independently of Galileo in January 1610. Of course, this led Galileo to accuse Marius of plagiarism in his *Il Saggiatore* in 1623. Galileo strenuously insisted that Marius obtained his knowledge of the satellites from his (Galileo’s) book. Being by now the most famous astronomer in Europe, Galileo’s charge stuck, ruining Marius’ reputation even to the present day.

Galileo had named the four satellites the “Medicean stars” in honor of his patrons, the Medici family of Florence. Television audiences now are very familiar with the Medici family as they feature as the patrons of Leonardo in the current hit show *Da Vinci’s Demons*.

Thus, it is not surprising Galileo was further inflamed by this passage in the book by Marius: *So then let these stars, “Medicean stars” to Galileo, their first observer in Italy, be for me, who first saw and observed them in Germany “Brandenburg Stars.”* Yes, Marius had the temerity to rename Galileo’s discovery to honor his own patrons,



Simon Marius [Source: Wikipedia]

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the Margraves of Brandenburg!

The new Portal includes a partial English translation of his 1614 book. To be precise, Marius actually first published his independent discovery of the Jovian satellites in 1612, but it was in an obscure pamphlet that received little notice at the time. The 1614 book is the one that became famous.

At least Marius saw *only* four satellites around Jupiter. After Galileo died in 1642, it seems that “open season” was declared in the hunt for, and discovery of, planetary moons. For example, in 1643 a book appeared with this title: *Nine stars seen around Jupiter, six around Saturn, several around Mars*. It was written by Antonius Schyrleus de Rheita (1604-60), who obviously had a vivid imagination. He dedicated the five “new” moons of Jupiter to Pope Urban VIII, calling them *Astres Urbanoctavianes*. The French astronomer Pierre Gassendi

(1592-1655) wrote a rebuttal the very same year, rightly claiming that the five new moons were just background stars.

While his discovery skills may have been wanting, Rheita was a pioneer in optics, as he improved Kepler’s two-lens inverting eyepiece by making it much sharper. He proposed a three-lens form, which later evolved into the four-lens form that is still sometimes used.

Thus we see Galileo, Rheita, Marius, and Gassendi all involved in convoluted ways with one another in the development of astronomy during the 1600s. The new Marius Portal should help anyone interested in this fascinating period understand it better, and it will certainly prove to be a valuable educational tool. 🗨️

CLIFFORD J. CUNNINGHAM was seen recently at the Skalnaté Pleso observatory in Slovakia, where comets and asteroids have been studied since 1943.