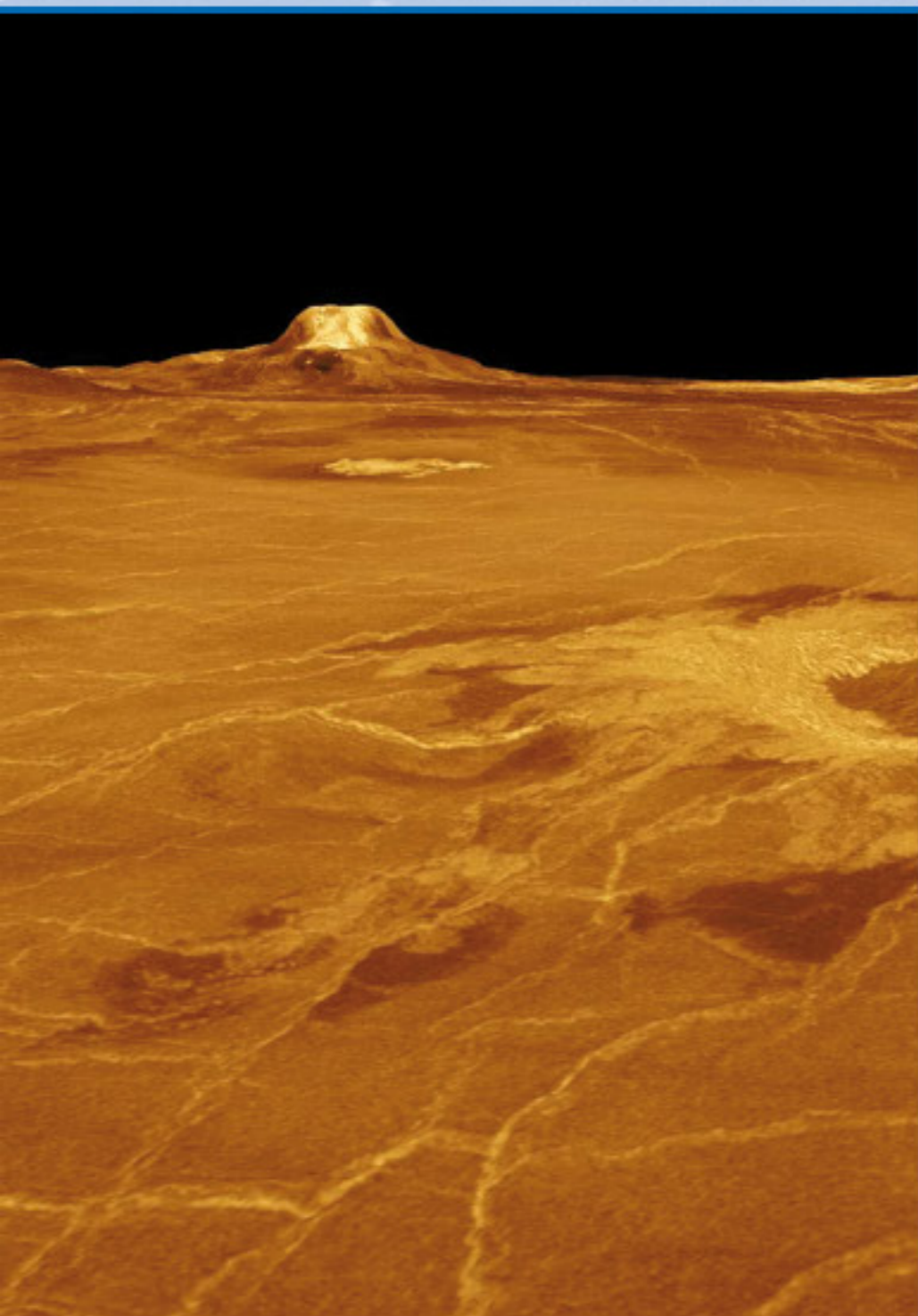


Maria Cunitz

[29 May 1610 - 22 August 1664]



Special Scientific Achievements

For the preface of her work, *Urania Propitia*, Maria Cunitz decided to do something very special: Next to the international scientific language of her time, Latin, she used her mother tongue, German. Thus, she provided many people with an access to science.

A crater on Venus was named *Cunitz Crater*.

1610 Maria Cunitz is born in Silesian Wohlau, which today belongs to Poland, on May 29. Her mother is descended from a respectable patrician family, her father is a member of the upper bourgeoisie and studied medicine, mathematics, and astronomy. In the same year, the astronomer and mathematician Galileo Galilei develops the telescope.

1615 At the age of five years, Maria is already able to read. Her father sees to it that she is given lessons in six languages, mathematics, music, fine arts, and history. Later on, he shapes her interest in astronomy.

1618 The Thirty Years' War breaks out. This means reprisals against Protestants and against followers of Copernicus' theory, according to which the sun and not the earth is the centre of our universe. To believe in this theory, at that time is regarded as heresy.

1623 At the age of 13, Maria is married to the jurist David v. Gerstmann, who does not restrain his young wife's thirst for knowledge. Since David dies only a few years later, Maria returns to her parents' house and devotes herself intensely to astronomy. She is trained by her father and by Elias Krätschmeier, physician and astronomer. Elias, who later on changes his name into Elias von Löwen, becomes her tutor.

1629 Maria Cunitz and her parents move to Liegnitz because especially her father is not willing to renounce his Protestant faith and to convert to Catholicism. He dies only a short time after that, and it is assumed that Maria's mother died a little later.

1630 After her parents' death, Maria Cunitz marries Elias von Löwen. The couple gets away from the war and moves to Pitschen, which is close to the Polish border.

1630 – 1647 Maria Cunitz studies the Rudolphine Tables, i.e. Johannes Kepler's planetary tables and star catalogue, comprising 1,005 stars, the data of which he collected in order to figure out their movements. Maria recognises logarithmic numbers in Kepler's tables.

She converts them into rational numbers, thus being able to confirm Kepler's statements. Since, at this time of conflict, research in astronomy is extremely dangerous, Maria and Elias take refuge in the estate of the Cistercian convent of Ołobok. Here, Maria is able to continue her scientific work with Kepler's tables.

1648 After the end of the war, Maria and Elias return to Pitschen.

1650 Financed from her own resources, Maria publishes her work, *Urania Propitia*, in the scientific language Latin as well as in German. With this work, it is her special concern to address interested laymen and to explain astronomy in an understandable and comprehensible way. It is only in the end of the 17th century that German is accepted as a scientific language. That is why Maria's early bilingual work is regarded as seminal and unique in German history of science amongst historians well into the 18th century.

1661 Elias von Löwen dies.

1664 Maria Cunitz dies in an unknown place on August 22.