



invisible to the naked eye, individual stars in the Milky Way, and four moons around the planet Jupiter. These discoveries changed the terms of the debate between geocentric and heliocentric cosmology and helped ensure the eventual acceptance of the Copernican planetary system. Albert Van Helden ' s beautifully rendered and eminently readable translation is based on the Venice 1610 edition ' s original Latin text. An introduction, conclusion, and copious notes place the book in its historical and intellectual context, and a new preface, written by Van Helden, highlights recent discoveries in the field, including the detection of a forged copy of Sidereus Nuncius, and new understandings about the political complexities of Galileo ' s work.

Directing his polemics against the pedantry of his time, Galileo, as his own popularizer, addressed his writings to contemporary laymen. His support of Copernican cosmology, against the Church's strong opposition, his development of a telescope, and his unorthodox opinions as a philosopher of science were the central concerns of his career and the subjects of four of his most important writings. Drake's introductory essay place them in their biographical and historical context.

Chronicles the life and times of the Tuscan astronomer and physicist, focusing on his defense of the Copernican theory and his struggles with the Catholic Church.

Inspired by a long fascination with Galileo, and by the remarkable surviving letters of Galileo's daughter, a cloistered nun, Dava Sobel has written a biography unlike any other of the man Albert Einstein called "the father of modern physics- indeed of modern science altogether." Galileo's Daughter also presents a stunning portrait of a person hitherto lost to history, described by her father as "a woman of exquisite mind, singular goodness, and most tenderly attached to me." Galileo's Daughter dramatically recolors the personality and accomplishment of a mythic figure whose seventeenth-century clash with Catholic doctrine continues to define the schism between science and religion. Moving between Galileo's grand public life and Maria Celeste's sequestered world, Sobel illuminates the Florence of the Medicis and the papal court in Rome during the pivotal era when humanity's perception of its place in the cosmos was about to be overturned. In that same time, while the bubonic plague wreaked its terrible devastation and the Thirty Years' War tipped fortunes across Europe, one man sought to reconcile the Heaven he revered as a good Catholic with the heavens he revealed through his telescope. With all the human drama and scientific adventure that distinguished Dava Sobel's previous book Longitude, Galileo's Daughter is an unforgettable story

“ Demonstrates an awesome command of the vast Galileo literature . . . [Wootton] excels in boldly speculating about Galileo ' s motives ” (The New York Times Book Review). Tackling Galileo as astronomer, engineer, and author, David Wootton places him at the center of Renaissance culture. He traces Galileo through his early rebellious years; the beginnings of his scientific career constructing a “ new physics ” ; his move to Florence seeking money, status, and greater freedom to attack intellectual orthodoxies; his trial for heresy and narrow escape from torture; and his house arrest and physical (though not intellectual) decline. Wootton also reveals much that is new—from Galileo ' s premature Copernicanism to a previously unrecognized illegitimate daughter—and, controversially, rejects the long-established belief that Galileo was a good Catholic. Absolutely central to Galileo ' s significance—and to science more broadly—is the telescope, the potential of which Galileo was the first to grasp. Wootton makes clear that it totally revolutionized and galvanized scientific endeavor to discover new and previously unimagined facts. Drawing extensively on Galileo ' s voluminous letters, many of which were self-censored and sly, this is an original, arresting, and highly readable biography of a difficult, remarkable Renaissance genius. Selected as a Choice Outstanding Academic Title in the Astronautics and Astronomy Category “ Fascinating reading . . . With this highly adventurous portrayal of Galileo ' s inner world, Wootton assures himself a high rank among the most radical recent Galileo interpreters . . . Undoubtedly Wootton makes an important contribution to Galileo scholarship. ” —America magazine “ Wootton ' s biography . . . is engagingly written and offers fresh insights into Galileo ' s intellectual development. ” —Standpoint magazine

Mark Peterson makes an extraordinary claim in this fascinating book focused around the life and thought of Galileo: it was the mathematics of Renaissance arts, not Renaissance sciences, that became modern science. Galileo's Muse argues that painters, poets, musicians, and architects brought about a scientific revolution that eluded the philosopher-scientists of the day, steeped as they were in a medieval cosmos and its underlying philosophy. According to Peterson, the recovery of classical science owes much to the Renaissance artists who first turned to Greek sources for inspiration and instruction. Chapters devoted to their insights into mathematics, ranging from perspective in painting to tuning in music, are interspersed with chapters about Galileo's own life and work. Himself an artist turned scientist and an avid student of Hellenistic culture, Galileo pulled together the many threads of his artistic and classical education in designing unprecedented experiments to unlock the secrets of nature. In the last chapter, Peterson draws our attention to the Oratio de Mathematicae laudibus of 1627, delivered by one of Galileo's students. This document, Peterson argues, was penned in part by Galileo himself, as an expression of his understanding of the universality of mathematics in art and nature. It is "entirely Galilean in so many details that even if it is derivative, it must represent his thought," Peterson writes. An intellectual adventure, Galileo ' s Muse offers surprising ideas that will capture the imagination of anyone—scientist, mathematician, history buff, lover of literature, or artist—who cares about the humanistic roots of modern science.