Biographical Encyclopedia of Astronomers

Quetelet, Lambert Adolphe Jacques

Born Ghent, (Belgium), 22 February 1796

Died Brussels, Belgium, 17 February 1874

Lambert Quetelet became one of the most influential social statisticians of the 19th century, but is also remembered for his studies of meteor showers and their apparent radiants

Quetelet was the son of François-Augustin-Jacques-Henri Quetelet and Anne Françoise Vandervelde. He was educated at the lyceum of his native town. In 1815, when that school was converted to the College of Ghent, he was appointed a professor of mathematics. In 1819, Quetelet was awarded the institution's first Ph.D., for a dissertation on the theory of conic sections. That same year, he was appointed professor of mathematics at the Athenaeum of Brussels and was soon elected to the Royal Academy of Sciences and Arts. Quetelet was married in 1825; he and his wife had two children

During the 1820s, Quetelet began a campaign to find an observatory in Belgium. Upon this suggestion, he was commissioned to go to Paris and study the practice of astronomy under Dominique Arago, director of the Paris Observatory. While there in December 1823, Quetelet observed a subdivision in the A ring of Saturn, using the observatory's 10-inch achromatic refractor. He also learned probability theory from Jean Baptiste Joseph Fourier and Pierre de Laplace. Belgium's Royal Observatory was not completed until 1833, although Quetelet served as its director after 1828. There, he gave special attention to meteorological and geophysical observations.

Following the very intense Leonid meteor shower of November 12/13, 1833, Quetelet's attention was directed toward the occurrence and annual periodicity of meteor showers. In March 1837, he predicted the return of the Perseid meteors during the coming August. That same year, Quetelet produced the first catalog of historical sightings of this shower. Over time, he amassed more than 300 records of the appearance of this and other suspected meteor showers. Quetelet, however, was not alone in his recognition of the Perseid meteors. Two Americans, Connecticut bookseller Edward Herrick and Cincinnati physician John Locke, had independently documented the shower's annual nature. Quetelet is also regarded as the co-discoverer of the Orionid and Quadrantid meteor showers

Quetelet's other astronomical (and meteorological) observations included numerous solar and lunar eclipses, planetary and stellar occultations, the aurora borealis (and its magnetic anomalies), comets, asteroids, and bolides. He determined the longitude difference between Brussels and other European observatories by means of telegraph signals. A catalog of more than 10,000 stars, observed by Quetelet and his associates between 1857 and 1878, was published by his son Ernest in 1887

Quetelet's most famous work, *On Man and the Development of His Faculties: A Treatise on Social Physics* (1835), laid the foundations of sociology and introduced his concept of the "average man." In 1853, he organized the first international statistics conference and was appointed its president. Toward the end of his life, Quetelet published several histories of the physical and mathematical sciences in Belgium. At the time of his death, he was regarded as Belgium's most revered scholar.

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