



LEARN - Celestial Milestones: Fascinating Stories Behind Historic Asteroid Discoveries

Learning Objective:

Learn about the circumstances around historic asteroid discoveries and captivating fun facts of the major discovery milestones.

Overview

As the number of asteroid discoveries has soared throughout the decades, the creativity of their discoverers has been put to the test. The naming process of certain objects in the Main Belt has revealed intriguing circumstances, particularly those associated with historic milestones, where a significant number of asteroids with defined orbits were uncovered.

Specifics

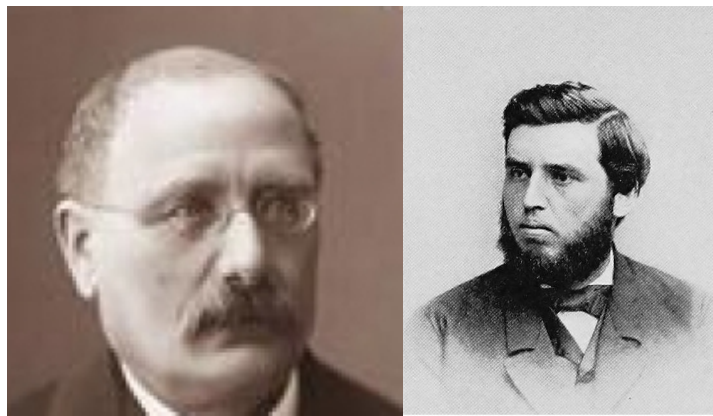
Asteroids have long fascinated astronomers and space enthusiasts alike. These celestial bodies, scattered throughout our solar system, hold mysteries waiting to be unravelled. Over the years, as our understanding of these asteroids has grown, so has the need to creatively name them. Some asteroids hold historical significance or mark milestones in our exploration of the solar system. Let's embark on the fascinating journey to discover major asteroid milestones.

The first asteroid on our journey is **Ceres**, which holds a special place in history. Discovered in 1801 by Giuseppe Piazzi, Ceres was not initially given the asteroid designation, as the term had not yet been introduced. At the time, astronomers were [in search of a lost planet hypothesised by a popular mathematical theory](#). Piazzi's discovery was suggested to be named Cerere Ferdinanda, a homage to Ceres, the Roman goddess of agriculture, and Ferdinand of Sicily, Piazzi's monarch and patron. However, this name did not gain acceptance beyond Italian astronomers, and the asteroid became known simply as Ceres.

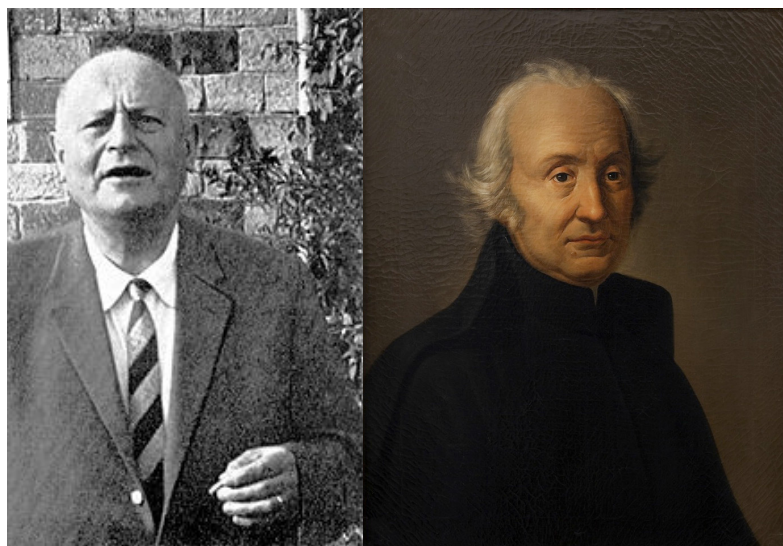


Interestingly, Ceres holds a unique distinction among Main Belt objects. It is not only the first asteroid discovered but also the only one to have had three different classifications in history: planet, asteroid, and dwarf planet. The term "asteroid," meaning "like a star" in Greek, was coined after the discovery of objects similar to Ceres in terms of distance and visual characteristics. Thus, Ceres integrated a new category in the realm of celestial bodies.

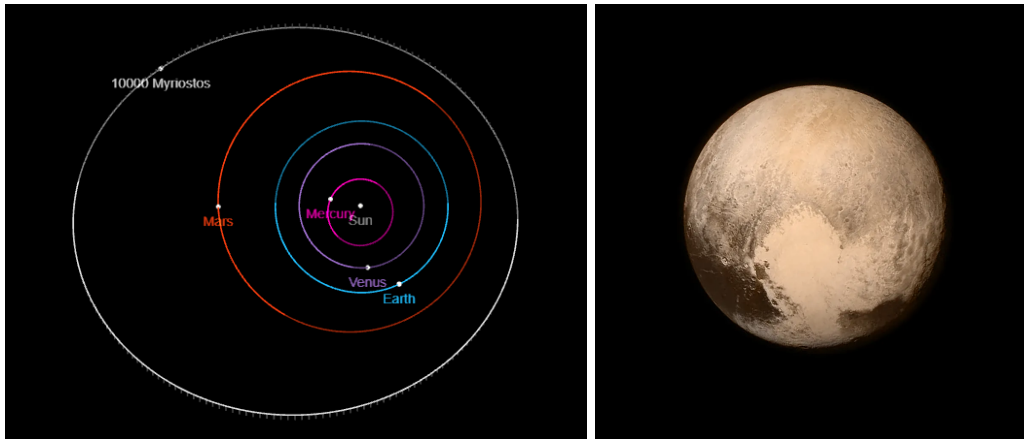
Moving on to asteroid 100, we encounter **Hekate**, discovered in 1868. In the 19th century, it was customary to name asteroids after female mythological characters. Hekate, named after the Greek goddess of witchcraft, appeared to follow this tradition. However, there's more to the story. The name also resembles the Greek word "hekaton," meaning "one hundred." As the 100th asteroid was discovered, this name choice might have been influenced by the similarity between the two words. It's fascinating how subtle connections can shape the designation of these celestial entities.



Now, let's fast forward to 1923, a time when asteroid discoveries were booming thanks to advancements in photography techniques. With the exponential growth in the number of asteroids, traditions of using feminine and mythological names were abandoned, paving the way for new criteria. Enter asteroid 1000, known as **Piazzia**. In a noble gesture, German astronomer Karl Wilhelm Reinmuth, who had discovered nearly 400 asteroids, named the 1000th asteroid in honour of Giuseppe Piazzi, the discoverer of the very first asteroid. It was a heartfelt recognition of the pioneering spirit that began the era of asteroid exploration.



The journey through asteroid milestones takes us to 1951 and the discovery of 10000 **Myriostos**. Interestingly, this asteroid was only officially named in 1999, with "myriostos" meaning "ten thousand" in Greek. The name serves as an official tribute to all astronomers, both past and present, who have contributed to the discovery and determination of orbits for 10,000 minor planets. It is a testament to the collective effort spanning nearly two centuries and recognising the invaluable contributions made by professionals, amateurs, observers, and computers alike. However, the story of Myriostos is entangled with a controversial figure: Pluto.



In 1992, the discovery of objects in the Kuiper Belt, an area beyond Neptune's orbit, raised questions about the classification of Pluto. As the debate surrounding Pluto's status as a planet intensified, a proposal emerged in 1999 to attribute the milestone to Pluto instead of the asteroid discovered in 1951. Proponents of this idea argued that the similarities in size and orbital elements between Pluto and the trans-Neptunian objects (known as TNOs) justified this change. The proposal sparked widespread debate, captivating the media and the public. Ultimately, the International Astronomical Union (IAU) decided to attribute the milestone to the asteroid discovered almost 50 years before this proposal, but the controversy continued. Finally, in 2006, the IAU created a new category, dwarf planet, and included Pluto in it, effectively settling the matter.

Our final stop on this celestial journey takes us to the year 2000. Asteroid 100000, discovered in 1982 by astronomer Jim Gibson, was officially named **Astronautica**. This designation holds significance as it marked the 100,000th object with a defined orbit. In a fitting tribute to the 50th anniversary of the Space Age, Astronautica was chosen as a name that celebrated the practice of venturing beyond Earth's atmosphere. It serves as a reminder of humanity's quest for exploration and the remarkable achievements made in space travel.



As we reflect on these milestone asteroids, we can't help but wonder what the inspiration will be when we officially name the one-millionth asteroid. With each new discovery, the door to exploration and understanding opens wider. Perhaps the naming of the one-millionth asteroid will celebrate the collective efforts of scientists and enthusiasts who continue to unravel the secrets of our vast universe. Only time will reveal the name that will mark this momentous occasion and inspire future generations..

Learn more about this subject by visiting these websites:

[LEARN - How Are Asteroids Named?](#)

[LEARN - How Do Asteroids Get Provisional Designation?](#)

Space Reference - information, orbit simulation and real-time location: [1 Ceres](#), [100 Hekate](#), [1000 Piazzia](#), [10000 Myriostos](#) and [100000 Astronautica](#)