

Classification Conundrum:

Planets – Terrestrial, Gas Giant, Ice Giant, or Dwarf?



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**Michigan Science Teachers Association
Conference 2020**

In 1801 we got a new president – Thomas Jefferson, and a new planet!

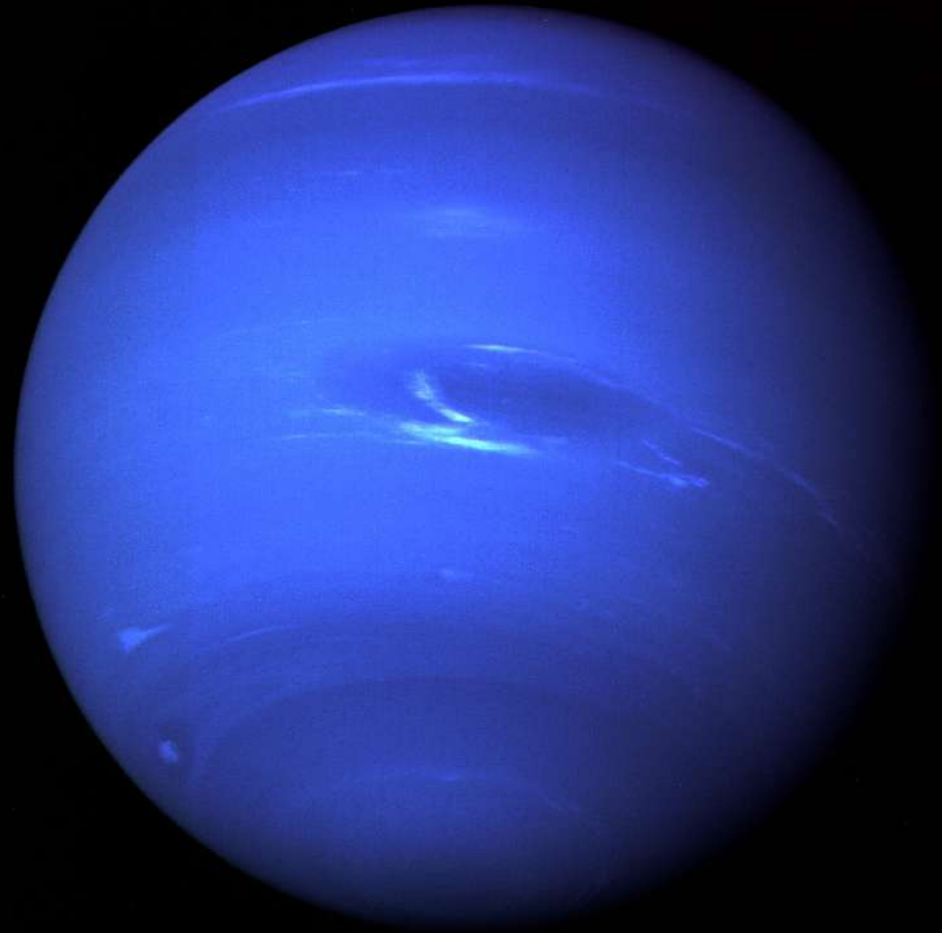


Ceres was discovered by Guiseppe Piazza and became our 8th planet....

Briefly!

More discoveries came....

Neptune in 1846





Juno



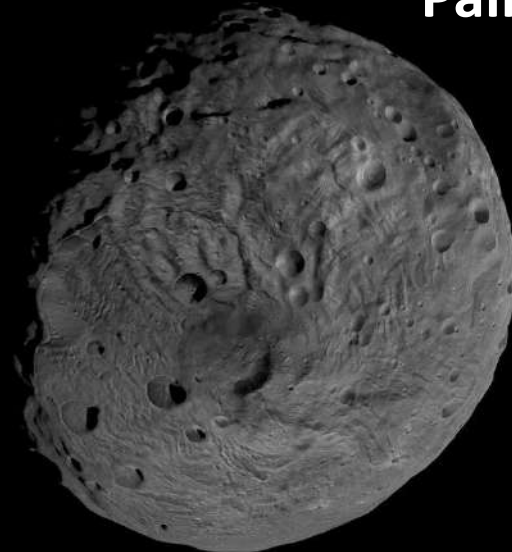
Ceres

Asteroids...

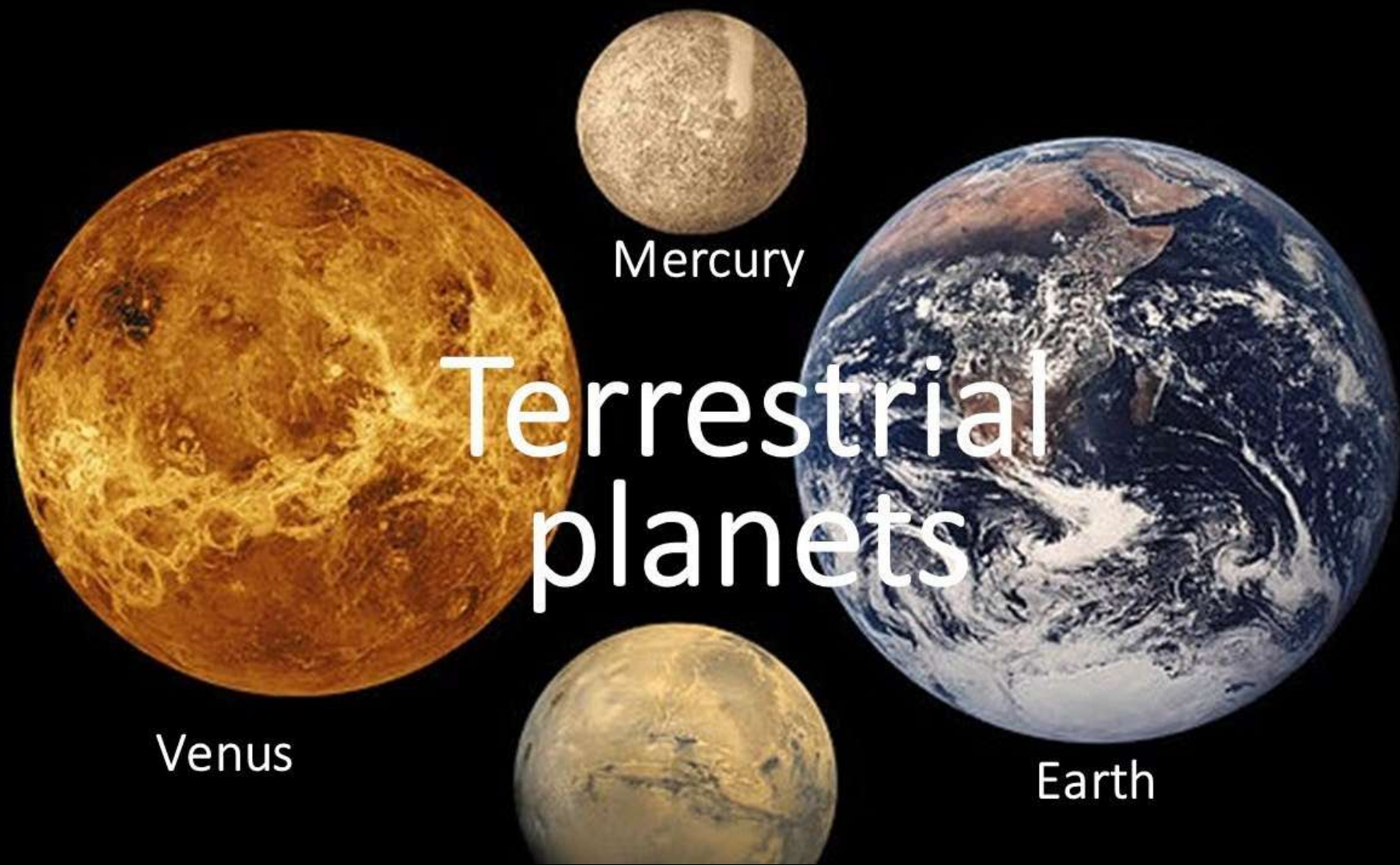
Ceres is no longer a planet! (~1850)



Vesta



Pallas



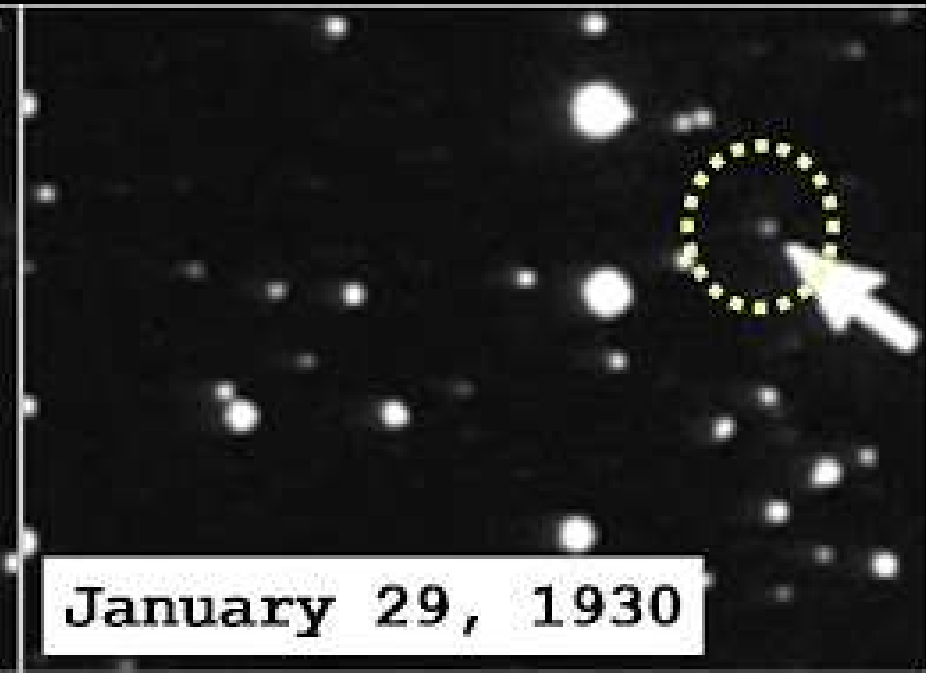
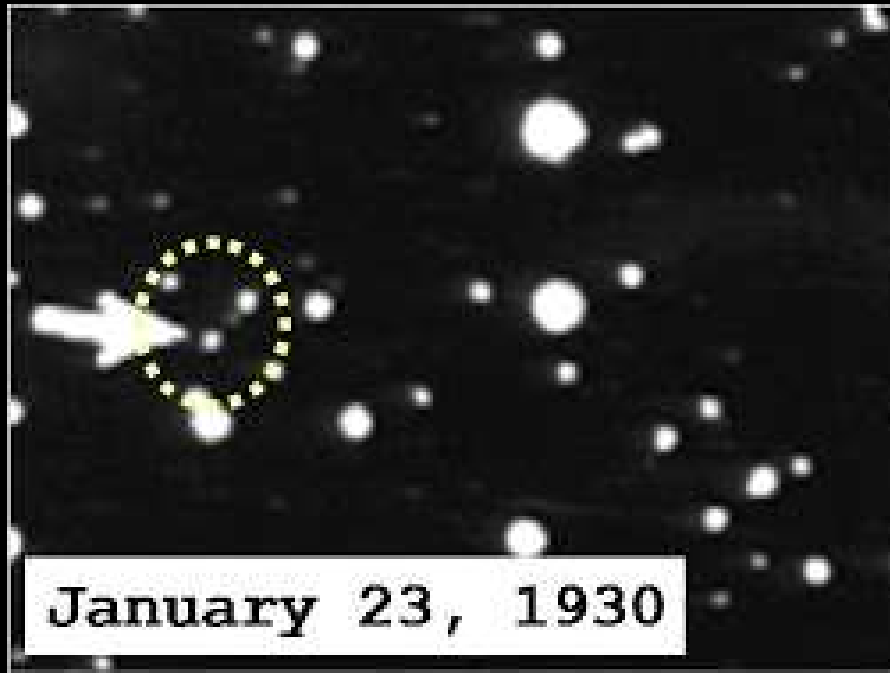
Terrestrial planets

Mercury

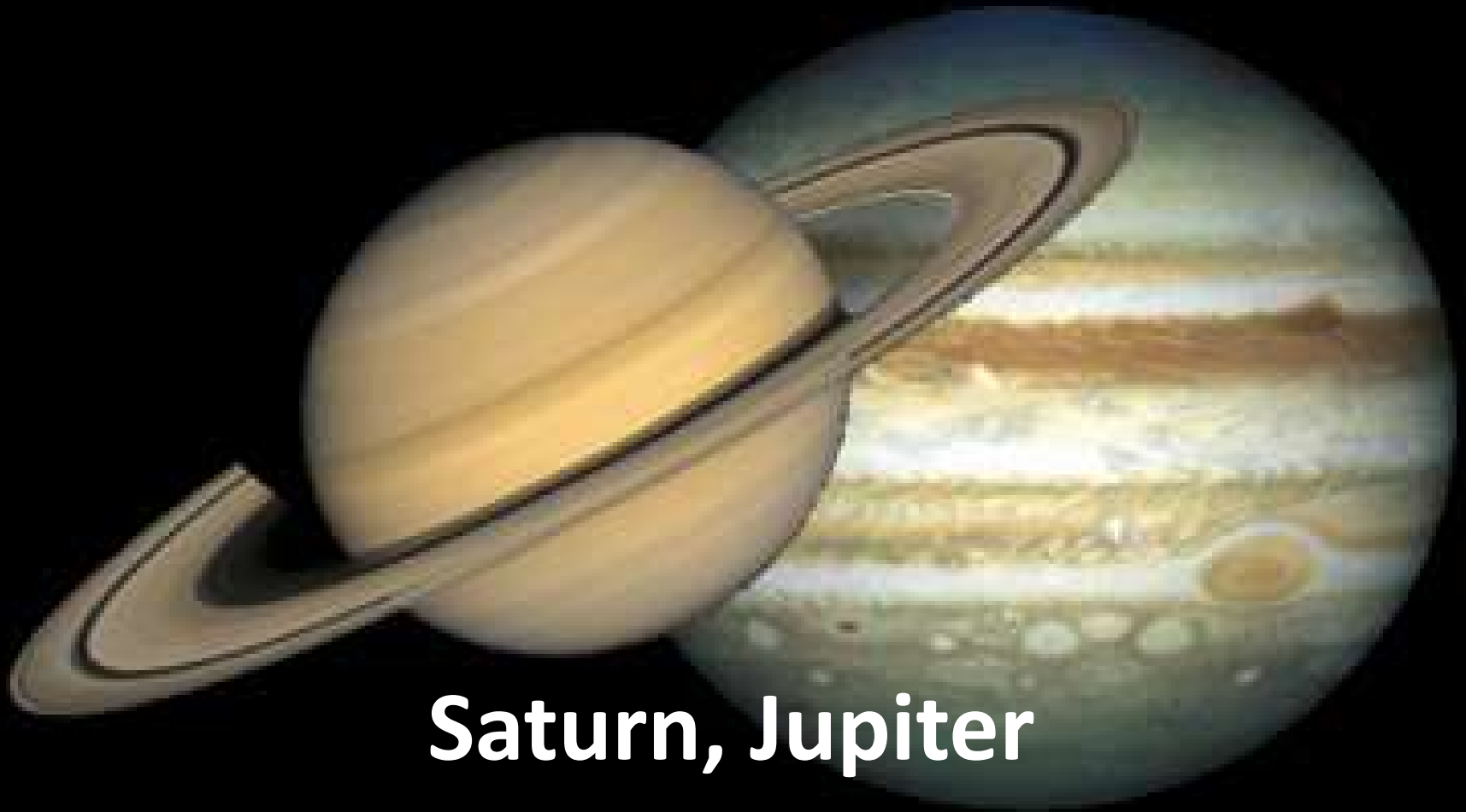
Venus

Earth

And Pluto in 1930

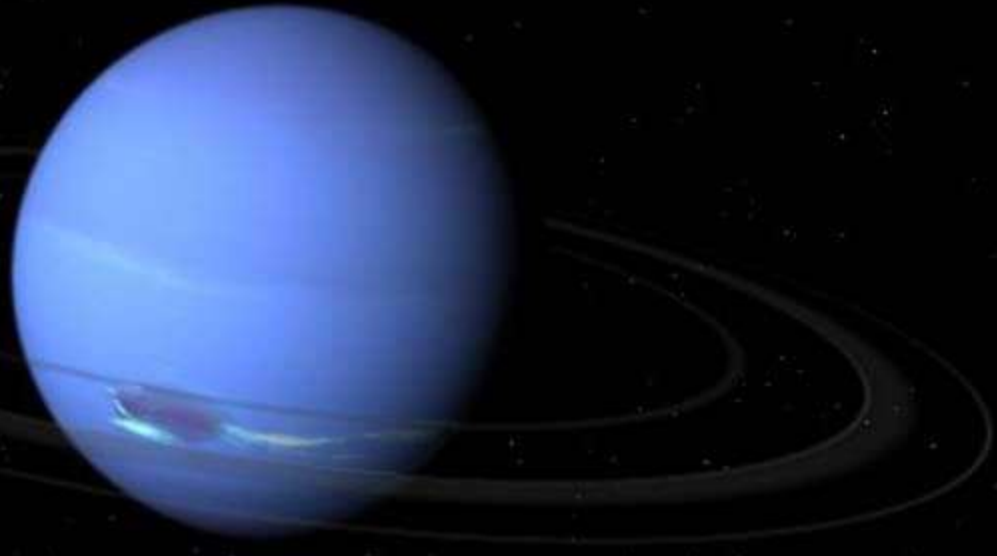


Gas Giants



Saturn, Jupiter

The ICE GIANTS

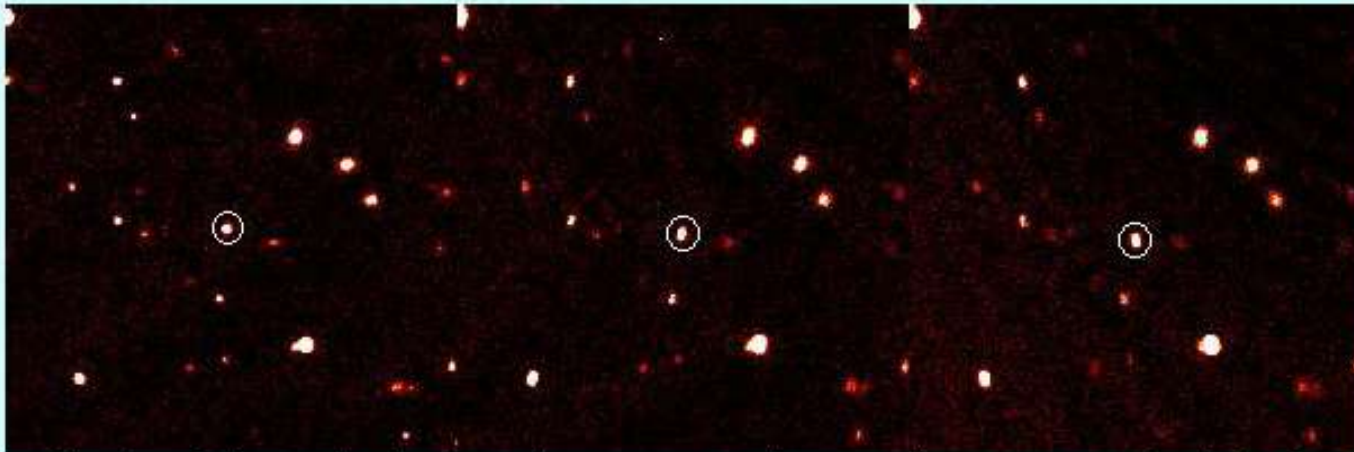


Uranus and Neptune



But – a 10th planet?

The discovery of ~~2003 UB313~~ Eris, the ~~10th~~ planet largest known dwarf planet



Discovery images of the dwarf planet Eris. The three images were taken 1 1/2 hours apart on the night of October 21st, 2003. The Eris can be seen very slowly moving across the sky over the course of 3 hours.

NEW [Eris is 27% more massive than Pluto](#)
[2003 UB313 is now officially Eris!](#)

Eris, the largest dwarf planet known, was discovered in an ongoing survey at [Palomar Observatory's Samuel Oschin telescope](#) by astronomers Mike Brown (Caltech), Chad Trujillo (Gemini Observatory),



SPACE.com

JANUARY 5, 2005

DISCOVERY OF ERIS IGNITES PLUTO-PLANET DEBATE

Dwarf planets



Pluto



Eris



Haumea



Makemake



Ceres

POOR
PLUTO



But should we be sad, isn't Pluto still a planet?

Types of Planets:

1. Terrestrial (Mercury, Venus, Earth, Mars)
2. Gas Giant (Jupiter, Saturn)
3. Ice Giant (Neptune, Uranus)
4. Dwarf (Pluto, Eris, Makemake, Haumea, Ceres)



Thanks for coming!

SCHECH#

