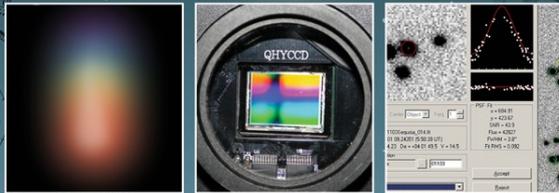


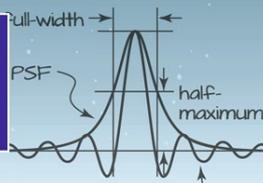
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President

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An Astrological and Astronomical View of

# HOLST 'S PLANETS

## Gustav Holst — *The Planets*

*The Planets* premiered 94 years ago at Queen's Hall in Langham Place, London, on September 29, 1918. The Queen's Hall Orchestra, under the direction of Holst's friend Adrian Boult, performed the orchestral suite for a small group of invited guests. On February 27, 1919, Boult conducted the Royal Philharmonic Society in a public concert featuring the work.



# The Astrological Planets

- Gustav Holst based his composition on the *astrological* thinking of the time as it applied to each of the known planets
- Each of the planets represents various attributes that are brought out in the tone and theme of the music
- Astronomically, each planet's physical characteristics seem to be the basis for its astrological attributes

# The Seven Movements

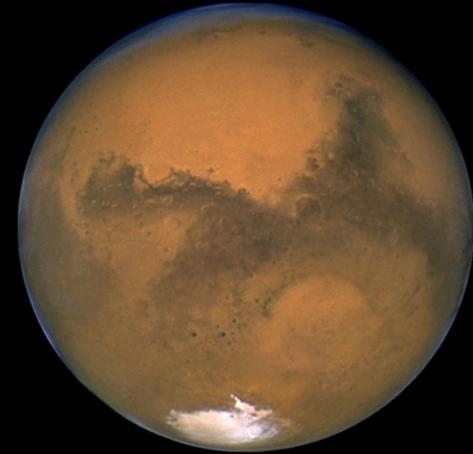
- Mars
- Venus
- Mercury
- Jupiter
- Saturn
- Uranus
- Neptune
- The Bringer of War
- The Bringer of Peace
- The Winged Messenger
- The Bringer of Jollity
- The Bringer of Old Age
- The Magician
- The Mystic

# MARS – The Bringer of War

Mars, named for the Roman god of war, has always been associated with combat and battle because of the bright red color reminding people of the blood of war.

Astrologically, Mars is associated with confidence, aggression, energy, strength, impulsiveness, and ambition.

In the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, Percival Lowell dedicated his life to studying Mars and believed that a declining civilization was clinging to life on a dry and dying planet. He identified hundreds of canals on the red planet.



# MARS – The Dry Planet

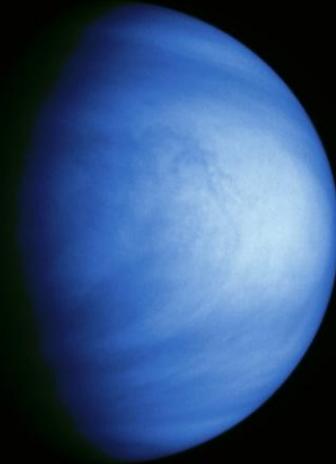
- Today, Mars is known as a dry planet with  $1/100^{\text{th}}$  the atmosphere of Earth and composed of more than 95%  $\text{CO}_2$
- The temperatures on Mars' surface range from -100 C to near 0 C in the equatorial regions
- While Lowell was wrong about how much water was on Mars, a few billion years ago, there *was* flowing water on the surface of Mars
- The Martian polar caps consist of both frozen  $\text{CO}_2$  and Water ice, mostly in the form of permafrost below the surface



# VENUS – The Bringer of Peace

Venus is the roman goddess of love and beauty. Astrologically, the planet Venus is associated with principles of harmony, beauty, balance, feelings, and affection. Venus is involved with the desire for comfort and ease and governs romantic relationships.

In the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, although the surface was never observable, the planet Venus was believed to host beings that lived in a paradise.



# VENUS – The Volcanic Planet

- The surface of Venus is very hot at a temperature of almost 500 C
- The atmospheric pressure of Venus' atmosphere is 92 times that of Earth
- Shrouded in a layer of highly reflective sulfuric acid clouds, the surface is a dry desert with features shaped by volcanism
- The Russian *Venera 10* probe, which landed on Venus in 1975, transmitted the first images of the slab-like surface features of the Venusian landscape

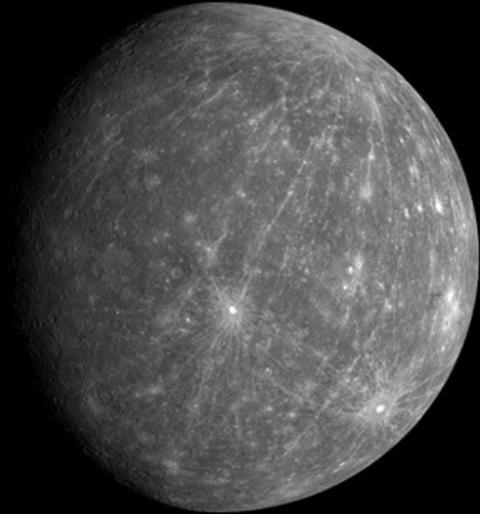


# MERCURY – The Winged Messenger

Mercury, the winged messenger of the gods, was noted for his speed.

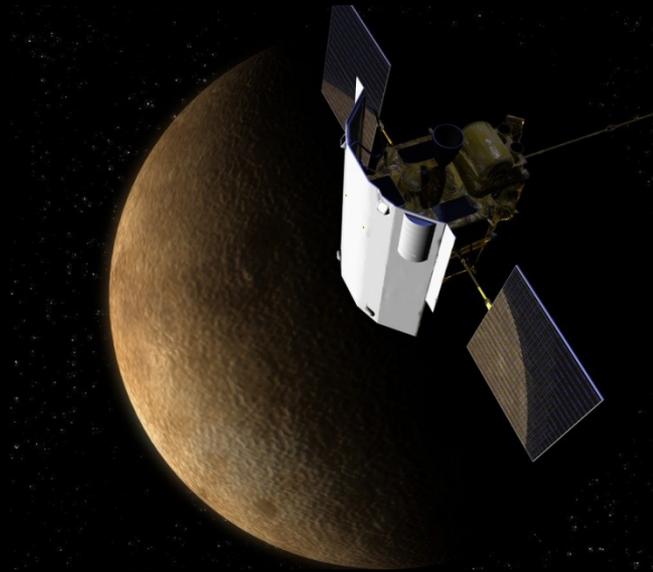
Consequently, it is not surprising that the ancients named this small planet for the swiftness of its path amongst the stars, always staying very close to the Sun.

Astrologically, Mercury represents communications, thinking ability, rationality, and reason. Mercury reigns over all forms of communication and education.



# MERCURY – The Small and Swift

- Today, Mercury is known as the smallest of the “classical” planets and circles the Sun in only 88 days
- Mercury is also the densest planet of the Solar System and has a large core with an overlying mantle and crust
- NASA’s *MESSENGER* probe has provided more than 175,000 images since its first flyby of Mercury nearly 5 years ago



# JUPITER – The Bringer of Jollity

Astrologically, Jupiter is associated with the principles of growth, expansion, prosperity, and good fortune.

Jupiter governs fundamental institutions of the law, religion, and higher education.

Jupiter is also associated with the urge for freedom and exploration, humanitarianism, and protection.

The planet Jupiter is the king of all the planets.



# JUPITER – The Failed Star

- Jupiter, the largest planet in the Solar System, is considered a failed star
- Jupiter is made up of 75% Hydrogen and 25% Helium and puts out more heat than it receives from the Sun
- NASA has launched several space probes over the past 35 years to investigate Jupiter and its four large moons, which rival Mercury and Pluto in size



# SATURN – The Bringer of Old Age

Astrologically, Saturn is associated with cold, and slowness, and sadness. Where there is life, Saturn brings death; where there is knowledge, Saturn brings fear; where there is luck, Saturn brings misfortune.

Saturn is the bringer of old age.

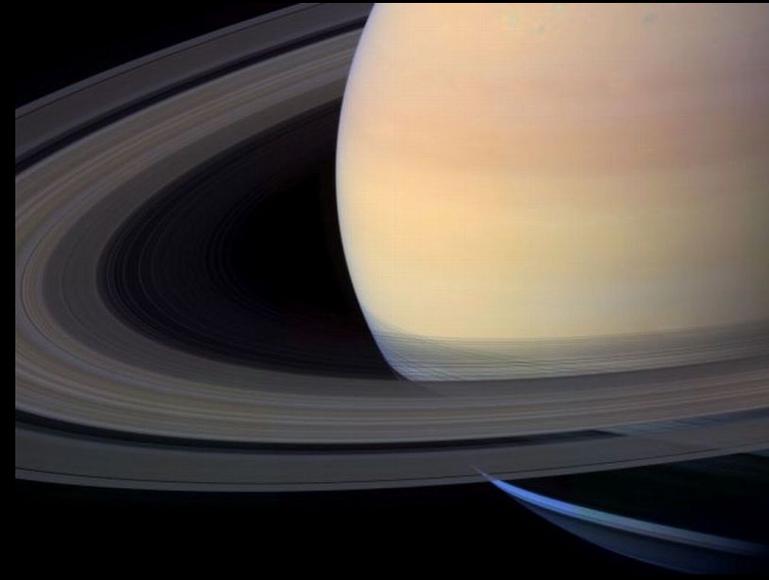
Saturn is associated with the element Lead (Pb).

These associations were made before the invention of the telescope and the discovery of Saturn's beautiful ring system.



# SATURN – The Ringed Planet

- Saturn's rings have fascinated amateur and professional astronomers since Galileo used the telescope to observe the heavens
- Although Saturn is a gas giant, its density is so low that it would actually float if you could place it in a huge bowl of water
- NASA has discovered many interesting facts about Saturn's rings, including small moons that are embedded in the ring system and cause the rings to form waves and other patterns



# URANUS – The Magician

In astrology, Uranus is associated with genius, individuality, new ideas, and discoveries and inventions.

Uranus is the magician who brings forth magical devices and ideas, and radical and original thoughts.

Uranus governs social gatherings and groups, especially those associated with progressive or humanitarian ideals.



# URANUS – The Lopsided Planet

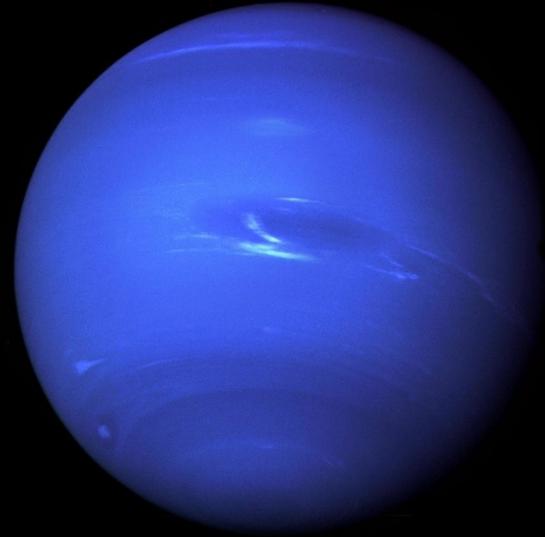
- Uranus seems to roll along the plane of the Solar System because its axis is tilted  $98^\circ$  to the plane of the ecliptic
- Uranus circles the Sun every 84 years and is about 3 billion km from the Sun
- Like Saturn, Uranus has rings, although not as many and not nearly as bright. They are generally not detectable except via spacecraft, although they can be detected during the occultation of stars



# NEPTUNE – The Mystic

Astrologically, Neptune is associated with creativity and compassion, but also with illusions and deception.

Neptune governs those places involved with a withdrawal from society.



# NEPTUNE – The Discovered Planet

- Neptune was the first planet to be discovered using mathematical prediction rather than by observation
- Neptune was discovered in September 1846 by Johann Galle based on a predicted position provided by Urbain Le Verrier
- Neptune is the most distant of the 8 planets\* at about 4.5 billion km from the Sun

\*Pluto was demoted to a dwarf planet in 2006 by the International Astronomical Union (IAU)

