

WEEKLY STARGAZERS' NEWSLETTER

by Dr. Bob

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These are the notes that I use for the weekly radio broadcast on Rome Radio Station WLAQ AM 1410 and FM 96.9. The program airs at 7:50 a.m. each Tuesday morning. The radio station also has a live FaceBook broadcast at the same time: WLAQ-Rome. Send questions to: ryoung@highlands.edu

OBSERVATION PERIOD:

09/03/24 – 09/09/24

FUN FACT OF THE WEEK

The Sun is 400 times larger than the Moon, but it is also 400 times as far away, making both objects appear to be the same size in our sky.

MOON FOR THE WEEK:

The Moon will be First Quarter on Monday, September 11th and it will be waxing from New to First Quarter, during the week. Today, Tuesday (9/3) the Moon will set in the West shortly after the Sun. Each day, it will set later and later until by Monday (9/9), it will be high along the meridian at Sunset. Notice that the Moon will appear 15 degrees further East each day that you view it and the right side of the sun will be illuminated.



On September 5th (Thursday), the Moon will reach Apogee, 406,211 kms from Earth. That means that the Moon will be as far away from the Earth as it gets in its monthly trip around the Earth.

The Sun --

The Sun rises at 07:14 hrs (7:14 a.m.) this week and sets at 20:06 hrs (8:06 p.m.)

This means that the Sun is above the horizon for Sun is “up” for 12 hrs. and 52 minutes. You might begin to notice that the days are shorter and the Sun does not get as high as it did a few weeks ago.

The Sun climbs to an altitude of 63.6 degrees this week. The Sun is in the constellation Leo, the Lion.

The Earth is currently 1.009 AUs from the Sun.

PLANETS

Mercury: This week Mercury rises in the East around 5:55 a.m. and sets at 19:09 (7:09 p.m.) Since the planet rises about an hour before the Sun, you might get a glimpse of it before sunrise.

Venus rises in the East at 9:11 a.m. and sets in the west at 21.08 (9:08 p.m.). It sets about an hour and a half after sunset. You should be able to see Venus in the early evening sky low on the western horizon. When you can see Venus in the evening, it is called the Evening Star.

Mars rises in the East at 1:45 a.m. which is more than 3.0 hours before the Sun, making Mars is wonderful object in the predawn sky. Look for its amber hue in the early predawn sky. Mars is in the constellation Taurus.

Jupiter rises in the East at 1:34 a.m. which is also about three hour before the Sun. Look low on the eastern horizon before sunrise to see this planet. You will notice that Jupiter and Mars are very close together. It should be very bright in the sky. If you have a pair of binoculars, you should be able to see the four Galilean Moon (Io, Europa, Ganymede, and Callisto).

Saturn rises in the East around 8:27 p.m. This means that you can see Saturn practically all night long, from sunset until sunrise. Saturn is an easy target in the late night sky until the early morning.

MARS ROVER PERSEVERANCE

To get regular and current updates on the progress of NASA's Perseverance 5rover on Mars, go to the websitehis :

<https://www.space.com/news/live/mars-perseverance-rover-update>

SATELLITES FOR THE WEEK (ISS PASSES)

07 Sep	-3.8	06:22:57	10°	NW	06:26:17	65°	SW	06:29:37	10°	SE	visible
08 Sep	-3.4	05:37:20	56°	N	05:37:42	62°	NE	05:41:03	10°	ESE	visible

Saturday 7th

Sunday 8th

STAR PATTERNS IN THE SKY

Cepheus is a constellation in the northern sky. It is named after Cepheus, King of Aethiopia in Greek mythology. It was one of the 48 constellations listed by the 2nd century astronomer Ptolemy, and remains one of the 88 modern constellations.

Cepheus looks like a house with the vertex of the roof pointing roughly toward the North Star...

Cepheus was the King of Aethiopia. He was married to Cassiopeia and was the father of Andromeda, both of whom are immortalized as modern day constellations along with Cepheus.

There is story about how Cassiopeia offended the sea god, Posidion by what he said. Posidion had the Kracken (sea monster) go to destroy the kingdom.. but a seer suggested that Cepheus offer his daughter Andromeda to the Kracken in exchange for not destroying the kingdom. Hence Andromeda the changed princess.. as she was chained to the rocks along a rocky shore. As the Kracken was about to devore her, Perseus the hero flying on Pegasus came to the rescue and saved her.

HISTORY OF THE WEEK:

September 8, 1966, Star Trek premiered

The show is set in the Milky Way galaxy, c. 2266–2269. The ship and crew are led by Captain James T. Kirk (William Shatner), First Officer and Science Officer Spock (Leonard Nimoy), and Chief Medical Officer Leonard H. "Bones" McCoy

(DeForest Kelley). Shatner's voice-over introduction during each episode's opening credits stated the starship's purpose:

“Space: the final frontier. These are the voyages of the starship Enterprise. Its five-year mission: to explore strange new worlds, to seek out new life and new civilizations, to boldly go where no man has gone before.”

While on NBC, Star Trek's Nielsen ratings were low and the network canceled it after three seasons and 79 episodes.

The series greatly influenced public interest in the U.S. Space Program and in education on the topic of space exploration. Star Trek: The Original Series ran from 1966 to 1969 benefited from the popularity of the televised July 1969 Apollo 11 Moon landing.

The association between Star Trek and NASA grew stronger over time – the first NASA orbiter shuttle, Space Shuttle Enterprise, was named after the USS Enterprise of Star Trek fame.

Sept 9,1789: William Bond BORN

In 1806, when he was seventeen years old, Bond saw a solar eclipse. Soon thereafter, he became an avid amateur astronomer.

When he built his first house, Bond made its parlor an observatory, complete with an opening in the ceiling out of which his telescope could view the sky.

He was an American astronomer, and the first director of Harvard College Observatory.

QUESTION OF THE WEEK

I am a bit confused on the proper name of our moon, the Moon. If I refer to a friend “Susan” in this sentence, “I will be going to the store with Susan”, I do not call her “the Susan”. What gives with the proper names of planets and moons? Lisa M.

That is a great question. You are correct, the name of the Earth's moon is “the Moon”. I had to look this up. Here is what the International Astronomical Union (IAU) decided.

“The IAU has been the arbiter of planetary and satellite nomenclature since its inception in 1919, and IAU recommendations rest on well-established scientific facts and have a broad consensus in the astronomical community. The designations of the then major planets (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto) and the Earth's satellite (Moon) appear in IAU Resolution No. 10, which was approved by the XVIth General Assembly of the IAU in Grenoble, France in 1976.”

Therefore, the designation of our Moon is “the Moon”, with a capital M and used as a name (a proper noun). The same applies to the designation of our planet — “the Earth”, of our Solar System (IAU Style Manual, 1989) and to all the other major planets. At first, it may seem these much-treasured celestial objects don't have “proper” names. However, it is just the opposite. Calling our Moon “the Moon” and our Solar System “the Solar System” reinforces their importance to humanity — they are not just any moon or solar system.