

WEEKLY STARGAZERS' JOURNAL

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:

04/26/22 – 05/02/22

MOON FOR THE WEEK:

The Moon is New on Saturday, April 30th. This is when the Moon, Sun and Earth are all lined up.

If you get up before the sun, you will see the Moon edging toward the sunrise eastern horizon. This is the only time that a Solar Eclipse can happen, when the Moon is between the Earth and Sun. Unfortunately, there will not be a Solar Eclipse this month.



HORIZON TO HORIZON PLANET VIEW

Sun:

The sun rises at 6:58 a.m. (EDT) and sets at 8:20 p.m. (EDT). The Sun is in Aries the Ram and it is still increasing its distance from the Sun in its orbit.

The sun is up 69.1 degrees at its highest point this week along the meridian!!!

The Planets:

Before sunrise, you can still see Saturn, Mars, Venus, and Jupiter.... The fifth naked-eye planet, Mercury, is now in the evening sky.

Venus and Jupiter are very close together... Saturn and Mars are spread far apart.

MARS ROVER PERSEVERANCE

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

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

SATELLITES FOR THE WEEK (ISS PASSES):

27 Apr	-3.0	05:09:12	43°	NNW	05:09:12	43°	NNW	05:12:10	10°	NE	visible
28 Apr	-1.1	04:22:55	21°	NE	04:22:55	21°	NE	04:24:08	10°	NE	visible
28 Apr	-1.2	05:56:44	10°	NW	05:58:00	12°	NNW	05:59:16	10°	N	visible
29 Apr	-1.6	05:09:26	17°	NW	05:09:37	17°	NNW	05:11:55	10°	NNE	visible
30 Apr	-1.1	04:22:59	18°	N	04:22:59	18°	N	04:24:10	10°	NNE	visible

STAR PATTERNS IN THE SKY

Canes Venatici

One of the 88 official modern constellations. It is a small northern constellation that was created by Johannes Hevelius in the 17th century.

Its name is Latin for "hunting dogs", and the constellation is often depicted in illustrations as representing the dogs of Boötes the Herdsman, a neighboring constellation.

Cor Caroli is the constellation's brightest star, with an apparent magnitude of 2.9.

The Whirlpool Galaxy is a spiral galaxy tilted face-on to observers on Earth, and was the first galaxy whose spiral nature was discerned.

In the western world Alpha CVn had no name until the 17th century, when it was named Cor Caroli, which means "Charles's Heart". There has been some uncertainty whether it was named in honour of King

Charles I of England, who was executed in 1649 during the English Civil War, or of his son, Charles II, who restored the English monarchy to the throne in 1660. The name was coined in 1660 by Sir Charles Scarborough, physician to Charles II, who claimed the star seemed to shine exceptionally brightly on the night of Charles II's return to England.

This is one of just a couple stars in the night sky actually named after a living person.

SPACE HISTORY OF THE WEEK

1928, April 28, Eugene Shoemaker born

American geologist and one of the founders of the field of planetary science. He is best known for co-discovering the Comet Shoemaker–Levy 9 with his wife Carolyn S. Shoemaker and David H. Levy.

Shoemaker received the Barringer Medal in 1984 and a National Medal of Science in 1992. In 1993, he co-discovered Comet Shoemaker–Levy 9 using the 18" Schmidt camera at Palomar Observatory. This comet was unique in that it provided the first opportunity for scientists to observe the planetary impact of a comet. Shoemaker–Levy 9 collided with Jupiter in 1994. The resulting impact caused a massive "scar" on the face of Jupiter. Most scientists at the time were dubious of whether there would even be any evident markings on the planet.

Shoemaker spent much of his later years searching for and finding several previously unnoticed or undiscovered impact craters around the world. Shoemaker died on July 18, 1997 during one such

expedition following a head-on car accident while on the Tanami Road northwest of Alice Springs

On July 31, 1999, some of his ashes were carried to the Moon by the Lunar Prospector space probe in a capsule designed by Carolyn Porco. He is the only person whose ashes have been buried on any celestial body outside Earth.

2001, April 28, Dennis Tito became first space tourist.

an American engineer and multimillionaire, most widely known as the first space tourist to fund his own trip into space. In mid-2001, he spent nearly eight days in orbit as a crew member of ISS EP-1, a visiting mission to the International Space Station.

Tito joined the Soyuz TM-32 mission on April 28, 2001, spending 7 days, 22 hours, 4 minutes in space and orbiting Earth 128 times. Tito performed several scientific experiments in orbit that he said would be useful for his company and business.[citation needed] Tito paid a reported \$20 million for his trip.

QUESTION OF THE WEEK

With the sun moving higher and lower in the sky relative to the north and south horizon, is there a place on earth where the sun never rises or it is always up in the sky? Louie J.

No, there is nowhere on earth where the sun never rises or never sets. There are three places on earth where the extremes do exist. Two of the places where the sun is up the longest or and the shortest times during the year: the poles.

For regions inside the polar circles, the maximum lengths of the time that the Sun is completely below the horizon is as much as 179 days at the Poles.

The time when the Sun is above the horizon at the poles is 186 days.

The region on the earth where the sun is highest in the sky most of the time is at the equator.

These are not too surprising to you I am sure... afterall, the average temperature at the equator is about 90 summer and 77 degrees winter.... poles is about -15 degrees summer and -60 degrees winter.