

astronomical calendar

BUHL PLANETARIUM & OBSERVATORY

spring
2017



MARCH

1	Wed	Venus 15 degrees to lower right of Crescent Moon (Look west at dusk)
4	Sat	Moon just below Aldebaran (Look southwest in the pm)
5	Sun	☾ First Quarter Moon – 6:32 am
12	Sun	Daylight Saving Time begins at 2 am (Turn clocks ahead one hour) ☽ Full Moon “Worm Moon” – 10:53 am
13	Mon	Jupiter 8 degrees below Moon (Look east in the pm)
20	Mon	Vernal Equinox. Spring begins – 6:29 am ☾ Last Quarter Moon – 11:58 am Saturn 1 degree south of Moon (Look south at dawn)
27	Mon	☀ New Moon – 10:57 pm



APRIL

1	Sat	Mercury at greatest elongation (Look west after sunset)
3	Mon	☾ First Quarter Moon – 2:39 pm
7	Fri	Jupiter at opposition (Look east in the pm)
10	Mon	Jupiter 1 degree right of Moon (Look southeast in the pm)
11	Tue	☽ Full Moon “Pink Moon” – 2:08 am
16	Sun	Saturn 4 degrees lower left of Moon (Look south in the am)
19	Wed	☾ Last Quarter Moon – 5:56 am
21	Fri	Lyrid Meteor Shower peaks – Overnight until dawn on April 22
23	Sun	Venus 6 degrees left of Crescent Moon (Look east at dawn)
26	Wed	☀ New Moon – 8:16 am



MAY

2	Tue	☾ First Quarter Moon – 10:46 pm
5	Fri	Eta Aquarid Meteor Shower Peaks – Overnight until dawn on May 6
7	Sun	Jupiter 1 degree to the right of Moon (Look southeast in the pm)
10	Wed	☽ Full Moon “Flower Moon” – 5:42 pm
13	Sat	Saturn 6 degrees left of Moon (Look south in the am)
18	Thu	☾ Last Quarter Moon – 8:32 pm
22	Mon	Venus 2 degrees left of Moon (Look east at dawn)
25	Thu	☀ New Moon – 3:44 pm



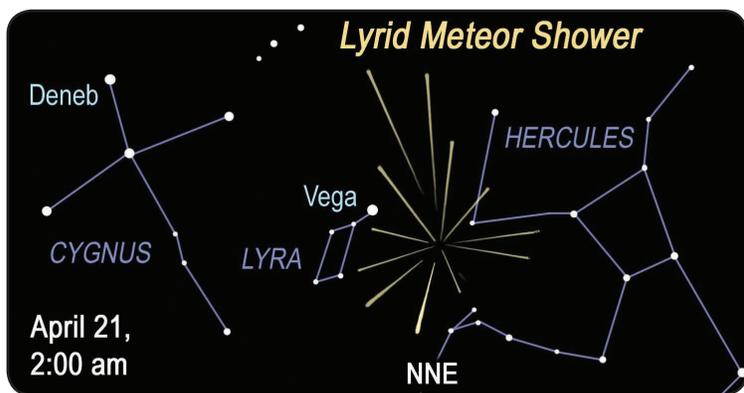
OBSERVATORY
SkyWatch

Join stargazers rain or shine for SkyWatch!

\$4 for non-members / \$2 for members and as an add-on to general admission or Omnimax show
For dates and details visit CarnegieScienceCenter.org/planetarium

Spring Planet Visibilities

March	Morning:	Saturn (S)
	Evening:	Jupiter (S)
	Early Evening:	Mercury, Venus, and Mars (W)
April	Morning:	Venus (E) and Saturn (S)
	Evening:	Jupiter (E), Mercury, and Mars (W) dusk
May	Morning:	Saturn (S), Mercury, and Venus (E)
	Evening:	Jupiter (SE) and Mars (W) dusk



Lyrid Meteor Shower

That lull in meteor activity will end this spring with the arrival of the Lyrid meteor shower in April. The Lyrids will peak this year overnight on April 21 until dawn on April 22. Lyrid meteors can be seen any time after midnight when the constellation Lyra is well above the horizon. The best time to look is from about 2 am until dawn. At that point, the local sky is pointing directly into the meteoroid debris stream, and observers can view one or two shooting stars every few minutes. The waning crescent Moon should not interfere with this year's display. You don't need binoculars or a telescope to observe Lyrid meteors. The naked eye is usually best for seeing shooting stars which often streak more than 45 degrees across the sky.

To enjoy the Lyrid meteor shower, look toward the northeast and observe from a location that is as dark as possible and that allows you to see a large portion of the sky. The higher Lyra and its bright star Vega climb into the sky, the more meteors you are likely to see. Meteors can appear in any part of the sky, although their trails will tend to point back toward the radiant near the constellation of Lyra.

astronomical fact:

NASA's Exoplanet Exploration Program has currently confirmed the existence of 3,439 planets orbiting a sun-like star in our galaxy. Only six of those exoplanets can be classified as potential Earths, because they are close in size to Earth and located within the habitable zone of a star. Planets in this zone will have a temperature that is just right for liquid water to exist on the surface.

Jupiter at its Brightest

Jupiter, the fifth planet from the Sun and the largest planet in the solar system, will reign supreme in the night sky this spring. The king of the planets is one of the easiest planets to spot in the sky. Though Venus is brighter, Jupiter is farther from the sun, so it's visible long after the Sun and Venus have set. Other than the Moon, it's the brightest object you can see in the middle of the night. On April 7, dazzling bright Jupiter and the Sun will be on opposite sides of the sky. Astronomers call this "opposition." During opposition, the Sun, Earth, and Jupiter form a straight line with the Earth in the middle. The Jovian giant will rise in the east around sunset, hover at its highest point in the south around midnight, and set in the west around sunrise. Jupiter will also shine at a stunning -2.46 magnitude near Virgo's brightest star, Spica.

To locate Jupiter in mid-April, step outside around 9 pm and face the southeast. The gas giant is the brightest object in the eastern sky and can be found about 30 degrees above the horizon. Because Jupiter is positioned high above the celestial equator in Leo, the planet should offer stunning views through a telescope this spring. Jupiter's altitude will allow its light to travel through much less of the Earth's turbulent and blurring atmosphere. The best time for telescopic observations will be after 10 pm.

Venus Returns to the Morning Sky

After emerging from the glare of the Sun in March, Venus will take center stage as our dazzling "morning star" this spring. Venus undergoes a 548-day cycle from a "morning star" to "evening star" and back to "morning star" again. Stargazers who wake before sunrise can view stunning Venus in the eastern morning sky for the rest of the year before it returns to the neighborhood of the Sun and emerges in the evening sky in early 2018.

Our radiant sister planet will be shining at its highest and brightest by the end of April. Look for the waning crescent Moon to pass within 5 degrees of Venus on April 23. Another stunning conjunction with the waning crescent occurs on May 22.

Space Out! Astronomy Weekend

Join the staff of Carnegie Science Center's Buhl Planetarium and the Amateur Astronomers Association of Pittsburgh on March 25 and 26 for Space Out! Astronomy Weekend. During this two-day celebration of all things astronomical, discover how to navigate the stars, get a close-up look at meteorites and Moon rocks, check-out the latest and greatest telescopes, and hear about the most up-to-date astronomical news from astronomers and other scientists.