

astronomical calendar

BUHL PLANETARIUM & OBSERVATORY

spring
2012

March 13
8:30 pm



MARCH

3	Sat	Mars at opposition—in the sky from dusk to dawn
5	Mon	Mercury at Greatest Evening Elongation—look west at dusk
8	Thu	○ Full Moon “Worm Moon”—4:40 am
11	Sun	Daylight Saving Time begins—turn clocks ahead 1 hour
11	Sun	Saturn 8 degrees upper right of the Moon—look southwest—dawn
13	Tue	Venus and Jupiter just 3 degrees apart – look west at dusk
14	Wed	① Last Quarter Moon 9:25 pm
20	Tue	Vernal Equinox, Spring begins—1:14 am
22	Thu	● New Moon—10:37 am
25	Sun	Jupiter 3 degrees to left of Crescent Moon—look west at dusk
26	Mon	Venus 3 degrees to right of Crescent Moon—look west at dusk
26	Mon	Venus at Greatest Elongation—look west at dusk
30	Fri	① First Quarter Moon—3:41 pm

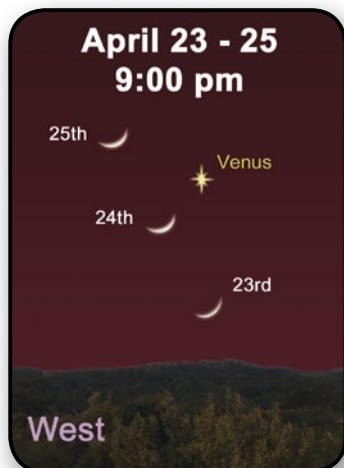
March 25 - 26
8:30 pm



APRIL

3	Tue	Mars 9 degrees to upper left of the Moon—look southeast in the pm
6	Fri	○ Full Moon “Pink Moon”—3:19 pm
7	Sat	Saturn 7 degrees above the Moon—look southwest in the am
13	Fri	① Last Quarter Moon—6:50 am
15	Sun	Saturn at opposition—in the sky from dusk to dawn
18	Wed	Mercury at Greatest Western Elongation—look east-southeast at dawn
21	Sat	● New Moon—3:19 am
22	Sun	Lyrid Meteor Shower peak—2 am to dawn
22	Sun	Jupiter 3 degrees below the Moon—look west—northwest at dusk
24	Tue	Venus 6 degrees to upper right of the Moon—look west at dusk
29	Sun	① First Quarter Moon—5:58 am
30	Mon	Mars 9 degrees to upper left of the Moon—look south in the pm

April 23 - 25
9:00 pm



MAY

4	Fri	Saturn 8 degrees above the Moon—look southeast
5	Sat	Eta Aquarid meteor shower peak
5	Sat	○ Full Moon “Flower Moon” 11:35 pm—largest full Moon of 2012
12	Sat	Last Quarter Moon—5:47 pm
20	Sun	● New Moon—7:47 pm
22	Tue	Venus 6 degrees upper right of Moon—look west-northwest at dusk
28	Mon	① First Quarter Moon—4:16 pm
28	Mon	Mars 8 degrees to upper left of Moon—look southwest in the pm
31	Thu	Saturn 7 degrees above the Moon—look south in the pm



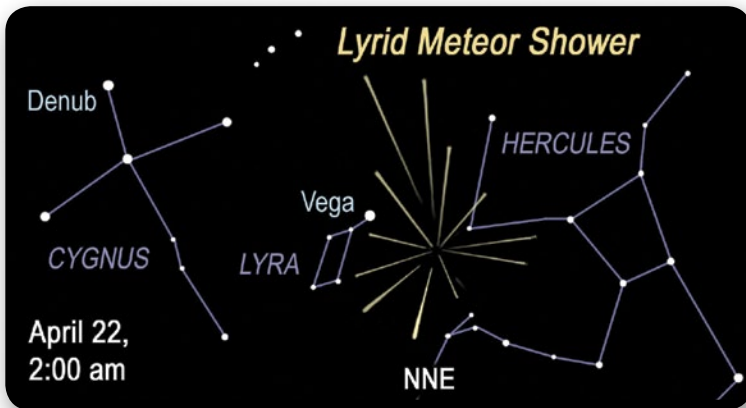
Join stargazers on Friday and Saturday evenings!

\$1 per person. No reservations are needed. Weather permitting.
Call 412.237.3327 the night of the session for the latest info.



Spring Planet Visibilities

March	Morning: Evening:	Saturn Mercury, Venus, Mars, and Jupiter
April	Morning: Evening:	Mercury Venus, Mars, Jupiter, and Saturn
May	Evening:	Venus, Mars, and Saturn



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 in the predawn hours 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, however, is between about 2 am and dawn. That’s when the local sky is pointing directly into the meteoroid debris stream. The new moon will guarantee a dark sky for this year’s show, allowing observers of the Lyrids to view one or two shooting stars every few minutes.

You won’t need binoculars or a telescope to observe Lyrid meteors. In fact, the naked eye is usually best for seeing meteors, which often streak more than 45 degrees across the sky.

Experienced observers suggest the following viewing strategy: Dress warmly. Bring a reclining chair, or spread a thick blanket over a flat spot of ground. Lie down and look up somewhat toward the north near the constellation of Lyra. The higher Lyra and its bright star Vega climb into the sky, the more meteors that 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.

did you know?

Our 16-inch Meade LX200 Schmidt-Cassegrain telescope shows you great detail of Jupiter’s clouds, Saturn’s rings and the lunar surface. Check it out Friday and Saturday evenings during SkyWatch!

Call 412.237.3327 for more details.

Mars Dazzles

Mars will be its biggest and brightest in two years when it arrives at opposition to the Sun on March 3. The Red Planet will come as close as 63 million miles from the Earth during opposition, and will shine at a brilliant -1.2 magnitude, just slightly dimmer than Sirius, the brightest star in the night sky.

Mars, the campfire-red world, will shine low in the east at nightfall and sit high in the south by midnight in March. Mars will continue its backward or westward motion towards Leo’s brightest star Regulus until April 16, after which it resumes direct motion (west to east) against the background stars. Mars will remain an “evening star” throughout the spring and summer, but will grow dimmer as the Earth travels away from Mars.

Saturn Returns to the Evening Sky

On April 15, Saturn—the ring world—and the Sun will be on opposite sides of the sky. Astronomers call this “opposition.” During opposition the Sun, Earth, and Saturn are lined up in a straight line, with Earth in the middle. This happens about every 13 months. During opposition, Saturn rises in the east around sunset, is high in the south around midnight, and then sets around dawn.

Stargazers can get their best view of Saturn’s rings around opposition because Earth and Saturn will be as close as they will get to each other all year.

During the weeks around opposition, this exquisite jewel will be unusually big and bright for backyard stargazers. A small telescope will show that our view of Saturn’s rings has improved dramatically since last year. The rings will be tilted 15 degrees to our line of sight. The best view of Saturn and its rings through a telescope will be after 11 pm, when the ring world is high above the turbulent air near the horizon.

To locate Saturn, step outside in mid-April around 10 pm and face the southeastern horizon. The ringed planet can be found about 25 degrees above the horizon and 5 degrees to the left of Virgo’s brightest star, Spica. Unlike the twinkling stars, bright golden Saturn will shine with a steady light.

Space Out! Astronomy Weekend

Join the staff of Carnegie Science Center’s Buhl Planetarium & Observatory, members of the Amateur Astronomers Association of Pittsburgh, and Kiski Astronomers on March 24–25 for Space Out! Astronomy Weekend. At this two-day celebration of all things astronomical, you can 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 the most up-to-date astronomical news from astronomers and other scientists.

astronomical fact!

Phobos, the larger of Mars’ two moons, is slowly sliding toward Mars. In about 50 million years, it will either smash into the planet or break apart, creating a dusty ring around the Red Planet.