Sky Events Calendar – July, August, & September, 2018

For more information, call the Museum at 337-291-5544 and ask to speak with someone in the planetarium. Some of these objects and events can be seen during Planetarium star parties — check the Museum web site to see a list of star parties and other events hosted by the Planetarium. Reminders of some of these events will appear on the Lafayette Science Museum Facebook page as the dates approach.

The Internet and media wildly over-hype non-events like “super moons” and “blue moons” and even some actual events like meteor showers. We’ll give you more realistic information!

July 1: The bright object ***near the moon*** between midnight and dawn will be ***Mars***.

July – September: This period starts with ***Mercury, Venus, Jupiter, and Saturn*** spread across the early evening sky from west to east. They appear in a line, and sometimes people get upset because they are “lined up.” However since our planetary system is pretty flat, they are always like that—it’s just more noticeable when three or more planets are visible, and particularly noticeable now! The apparent line is called the ***ecliptic***, the approximate plane of the solar system. Sometimes the ***moon*** will add to the view. By the end of July ***Mercury*** will disappear into the twilight but then ***Mars*** will show up, but not quite as close to the ecliptic as the others.

July 5: The bright star in the west near brilliant ***Venus*** for the next week or so will be ***Regulus*** in Leo, the Lion.

July 6: Earth reaches ***aphelion***, its farthest point from the sun for the year, at 11:47 a.m.

July 10: After moonrise in the east near 4:00 a.m. binoculars will show the ***crescent moon*** near the stars of the ***Hyades star cluster*** until about 5 a.m. when the twilight sky gets too bright.

July 10: If you live at the edge of town or in a rural area, an evening look at ***Saturn*** in binoculars may also reveal the soft, faint glow of the ***Lagoon Nebula***, a vast region of star formation about 5200 light years distant. The two objects will remain in the same binocular view for the rest of the summer. While you are at it, if you swing your binoculars around keeping Saturn near the edges of the view, you may spot other nebulae and star clusters!

July 14: The starlike object ***below the moon*** tonight in the west will be ***Mercury***.

July 15: The brilliant object ***near the moon*** tonight will be ***Venus***. Notice how far the moon has moved since last night when it appeared near Mercury!

July 20: Look at ***Jupiter*** in wide angle binoculars on this 49th anniversary of the Apollo 11 moon landing to see the double star ***Zubenelgenubi*** below it and to the left, and the ***moon*** above it.

July 24: The bright object ***near the moon*** tonight will be ***Saturn***.

July 27: ***Mars*** will be at opposition, meaning that it is opposite the sun as seen in Earth’s sky, rising at sunset and staying in the sky all night. In the early evening it will be the brightest starlike object in the eastern sky, and distinctly reddish. Tonight the ***moon*** will appear near it.

August 6: Before morning twilight use wide field binoculars to see the ***moon*** near the stars of the ***Hyades star cluster***. Low power telescope observers may see some ***occultations***, when the moon blocks our view of a star temporarily, the easiest one happening about 4:20 a.m. By the time the moon moves far enough to uncover that star about 5:28 a.m., twilight will be too bright to see it.

August 12/13: The ***Perseid meteor shower*** will peak tonight with best viewing for Acadiana between about 1:00 to 5:00 a.m. on the 13th. The nearly new moon will not interfere. Meteors will appear to come from the constellation Perseus in the northeastern sky. Realistically, deep rural Acadiana observers may see up to 30 meteors per hour, with those near cities seeing perhaps 20 per hour and those inside cities seeing very few.

August 14: The bright object ***near the moon*** tonight will be ***Venus***.

August 16 & 17: The bright object ***near the moon*** both these nights will be ***Jupiter***.

August 16 — September 8: Look for ***Mercury*** low in the east-southeast before dawn during this period, appearing as a moderately bright starlike object. Don't confuse ***Mercury and Procyon***, a bright star above and to the right of Mercury this month.

August 20: The bright starlike object ***near the moon*** tonight will be ***Saturn***.

August 22 & 23: The very bright object ***not far from the moon*** on these nights will be ***Mars***.

August 27: The bright star near brilliant ***Venus*** for the next week or so will be ***Spica*** in Virgo, the Girl. It will be a good landmark for spotting the planetary motion of Venus!

September 1: Notice where ***Mars*** is tonight against the background of distant stars. Look at it once a week for the rest of the year and notice how greatly it changes its position during that time as it orbits the sun.

September 8: Look in the east during morning twilight. The moderately bright star ***near the moon*** will be ***Regulus*** (in Leo, the Lion) and below them will be slightly brighter ***Mercury***.

September 12: During twilight, look for bright ***Venus*** below the thin ***crescent moon***.

September 13: The bright object ***near the moon*** tonight will be ***Jupiter***. They should make a pretty sight together in binoculars.

September 17: The bright starlike object ***near the moon*** tonight will be ***Saturn***.

September 19: The bright reddish, starlike object ***near the moon*** tonight will be ***Mars***.

September 21: Brilliant ***Venus*** is getting harder to find low in the west during evening twilight, and within a couple weeks will become lost to view as it passes nearly between Earth and the sun.

September 22: The ***September equinox*** occurs at 8:54 p.m., officially beginning Northern Hemisphere Autumn.

September 30: The bright star in the same binocular view with the ***moon*** before dawn will be ***Aldebaran*** in Taurus, the Bull. Some of the much fainter stars of the Hyades star cluster may also be visible but the brightness of the waning gibbous moon may overwhelm them.