



Berkeley Public Library
Weekly Sky Report
June 17 – June 23, 2018

The Planets

Jupiter has just passed opposition, when it is opposite the sun with Earth in between; this is also about as close as it gets to us, thus it is at its largest and brightest. Look for it rising over the Berkeley Hills around 8:30pm. **Saturn** has passed into the nighttime sky and appears around 10:45 as it trails behind Jupiter. Directly opposite Jupiter in the western sky is the Evening Star, **Venus**, which should be visible for the next five months or so. **Mars**, with its mysterious methane, intriguing organic material, and giant dust storm, is peaking over the Berkeley Hills just round midnight. It will become more of a presence in the coming months, leading up to its closest approach to Earth since 2003. That was the year when Mars was the closest it had been in almost 60,000 years! This year will be almost as close, and the red planet will shine brighter for us than the giant Jupiter.

The Moon

The moon will be quarter full mid-week, which is a good time to check out one of our 2 **telescopes at Central**. This is the best time for seeing the shadows play on the peaks of the mountains of the moon and in the depths of its craters. If you look at the dark area of the moon, you may see that it is not completely black and that you can see features. This is due to sunlight reflecting off the Earth: Earthshine; otherwise that part of the moon would be pitch black.

Hubble Space Telescope

The greatest orbiting optical telescope in history will have one more good pass to the South of Berkeley this week. The next good evening views will be at the end of July and then a bunch at the beginning of August. This will be Magnitude 2.3, which is about as bright as it gets for us.

June 17, 9:11pm South West 10°; 9:14pm South 21°; 9:17pm South East 10°



Central Library

2090 Kittredge Street
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Fax: 510-981-6111



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NASA TV

You can watch wonderful live programs from the **International Space Station** (ISS) on the nasa.gov website. This week, the highlights include StationLife, which explores the activities that take place on the ISS. Also, there are numerous time slots when you can watch live-streaming from the 4 high definition cameras pointed at Earth, which makes for a beautiful background on your computer. This feature is called the **Columbus Eye**, as the cameras are attached to the section of the Station named Columbus.

M, T, Th, Sat., 9:00am StationLife, hosted by astronaut Tracy Dyson.

Much of the information for this report comes from the wonderful web site, Heavens Above. You can enter your home city location and bookmark it for easy access: <http://www.heavens-above.com>. Other sources include: <http://www.space.com> and <http://www.nasa.gov>. And check spacex.com for possible launches.

Recommended Reading

We are coming up on the 50th anniversary of the Apollo moon landings. This amazing achievement is humbling when we consider that no one has set foot on the moon since those missions. It is only now that we are approaching that territory again with the efforts of SpaceX and Elon Musk's stated goal to send a couple of travelers around the moon in the next few years. Because of the effects of tidal locking, we only see one side of the moon; before Apollo, no human had laid eyes on this scene. Today, only six astronauts are still living who walked on the moon and only four of the pilots who stayed in orbit. Thus, only ten remain who have seen the far side of the moon.

Here is a wonderful new book about the first three humans to venture to the moon. The launch was on the heels of the fire that killed the crew of Apollo 1 and the giant Saturn 5 rocket remained unproven. Fifty years later, their story remains exhilarating.

Rocket men : the daring odyssey of Apollo 8 and the astronauts who made man's first journey to the moon. By Robert Kurson.

629.454 Kurson Copies are available!

This **Sky Report** is brought to you by Berkeley Public Library's [Cornerstones of Science](#), which is funded in part by the Silberstein Foundation. Cornerstones of Science is part of a multi-library initiative to bring STEM (Science, Technology, Engineering and Math) programming to patrons.



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