

Celestial

Volume 38 Issue 10



Observer

October 2018



Central region of M-31 by Dave Majors. Prime Focus 1500 f/10. Stack of 28 60 sec images ISO equiv 3200.

Next Meeting: Astronomy Movie Night on Oct. 25th at 7pm at the Wesley room at 1515 Fredericks in SLO.

Also: Special lecture on Exoplanets with special guest at the Cal Poly on Wed Oct 10th at the Spanos Theater! *Details inside.*

Next Star Gazing: Saturday, October 6th at sunset at the Santa Margarita KOA. See inside for directions and a map.

Upcoming dates:
Nov 10th and Dec. 8th.

Next Meeting: Last one of the year!

October 25th, 2018 at 1515 Fredericks in San Luis Obispo, Wesley Room

(Note: No club meetings scheduled for November or December.)

Get ready for a CCAS Astronomy Movie Night! Lee Coombs will be conducting our monthly CCAS meeting, and I'll send out the details about the movie we're showing just prior to the meeting date. Feel free to bring any astronomy equipment for show and tell!

Next Star Gazing

October 6th, 2018 at sunset (7:20PM) at the Santa Margarita KOA

Our Sky Star Parties occur once a month, and are free and open to the public, and also weather-permitting. Check our website for all the details!

Our next star gazing events for winter are: November 10th and December 8th.

Astronomy Event: ExoPlanet Lecture

October 10th, 2018 at the Spanos Theater at Cal Poly

(Note: No club meetings scheduled for November or December.)

On October 10th (Wed), you are invited to the exoplanet lecture in the Spanos Theatre that is open to the public! Amherst College astronomy professor Kate Follette is talking about her work as a planet hunter. She is also giving the physics colloquium the next day and spending two days consulting on my cosmic evolution project.

Kate Follette, an astronomy professor at Amherst College, will take the audience inside the discovery of planets outside of our solar system. Her exploration will include how, when and where planets form. Follette has traveled the world from Chile to Hawaii to observe planets in our galaxy using large, ground-based telescopes. She'll explain how astronomers can "de-twinkle" stars to make incredibly accurate observations, including detecting the infrared waves coming from newly formed planets. A question and answer session will follow the presentation. The presentation is sponsored with donations from Joan and Bob Field.

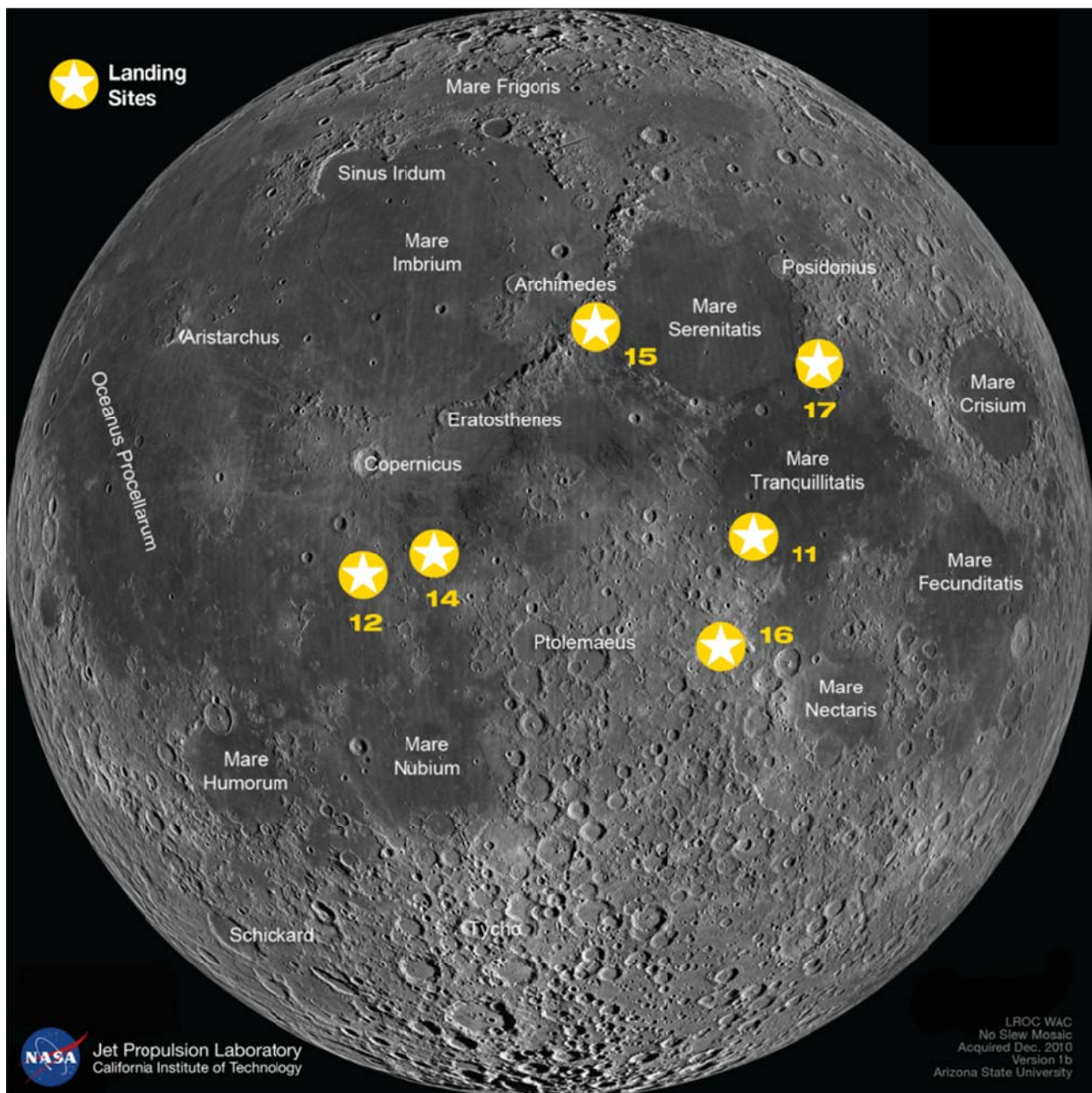
For more information, please visit: <https://evolution.calpoly.edu/exoplanets>



Observe the Moon

By Jane Houston Jones and Jessica Stoller-Conrad

This year's International Observe the Moon Night is on Oct. 20 when the 11-day-old waxing gibbous Moon will rise in the late afternoon and set before dawn. Sunlight will reveal most of the lunar surface and the Moon will be visible all night long. You can observe the Moon's features whether you're observing with the unaided eye, through binoculars or through a telescope.



light and dark. Another feature, the Jura Mountains, ring the Moon's western edge. You can see them catch the morning Sun.

- Just south of the Sinus Iridum you can see a large, flat plain called the Mare Imbrium. This feature is called a mare—Latin for “sea”—because early astronomers mistook it for a sea on Moon's surface. Because the Moon will be approaching full, the large craters Copernicus and Tycho will also take center stage.
- Copernicus is 58 miles (93 kilometers) across. Although its impact crater rays—seen as lines leading out from the crater—will be much more visible at Full Moon, you will still be able to see them on October 20. Tycho, on the other hand, lies in a field of craters near the southern edge of the visible surface of the Moon. At 53 miles (85 kilometers) across, it's a little smaller than Copernicus. However, its massive ray system spans more than 932 miles (1500 kilometers)!
- And if you're very observant on the 20th, you'll be able to check off all six of the Apollo lunar landing site locations, too!
- In addition to the Moon, we'll be able to observe two meteor showers this month: the Orionids and the Southern Taurids. Although both will have low rates of meteors, they'll be visible in the same part of the sky.
- The Orionids peak on Oct. 21, but they are active from Oct. 16 to Oct. 30. Start looking at about 10 p.m. and you can continue to look until 5 a.m. With the bright moonlight you may see only five to 10 swift and faint Orionids per hour.
- If you see a slow, bright meteor, that's from the Taurid meteor shower. The Taurids radiate from the nearby constellation Taurus, the Bull. Taurids are active from Sept. 10 through Nov. 20, so you may see both a slow Taurid and a fast Orionid piercing your sky this month. You'll be lucky to see five Taurids per hour on the peak night of Oct. 10.

You can also still catch the great lineup of bright planets in October, with Jupiter, Saturn and Mars lining up with the Moon again this month. And early birds can even catch Venus just before dawn!

Find out more: <https://moon.nasa.gov/observe>.

CCAS Officers

Feel free to connect with us!



President: Joseph Carro

Vice President: Tom Frey

Vice President: Aurora Lipper

Outreach Coordinator: Dave Majors

Treasurer: Lee Coombs

Celestial Advisor: Kent Wallace

Webmaster: Joe Richards

CCAS Contact Information

Founded in 1979, the Central Coast Astronomical Society (CCAS) is an association of people who share a common interest in astronomy and related sciences.

Central Coast Astronomical Society

PO Box 1415

San Luis Obispo, CA 93405

Website: www.centralcoastastronomy.org

Facebook: www.facebook.com/CentralCoastAstronomicalSociety

Lectures & Star Parties

MONTHLY MEETING & LECTURE

On the fourth Thursday of the month (Jan-May, Aug-Oct), we often have world-renowned professionals and amateurs in astronomy speak about their projects during our monthly meetings. The talks are informal and questions are invited.

Meetings begin at 7:30 p.m. in San Luis Obispo. For location and directions, visit our website: www.sloastro.org

OUTREACH PROGRAM

We offer a limited number of outreach programs where we bring our star party to you. These custom events include a talk about current topics in space science. After the lectures, we make our telescopes available for your group to observe the wonders of the night sky.

STAR-GAZING EVENTS

Join us for a star-gazing evening by observing the dark skies through club members' telescopes. It begins just before sunset on one Saturday each month. The Star Party is hosted in Santa Margarita. (See website www.sloastro.org for dates, times and locations).

Need help operating your telescope? Bring your telescope one hour early for help on how to work your telescope by our friendly astronomers.



Why Join CCAS?

BENEFITS OF MEMBERSHIP

- Subscription to *Celestial Newsletter*, our monthly bulletin of articles and events
- Interaction with world class speakers as they present cutting edge astronomical research
- Discounts on *Sky & Telescope* and *Astronomy* magazines
- Social events, such as our annual Star-B-Que
- Club telescopes – use one of the club's loaner scopes, complete with instructional lessons
- Access to 'Members Only' are of the website containing observing tips, scope tricks, and educational articles for all levels
- Field trips – to observatories and other locations of scientific interest, such as Mt. Wilson Observatory in Pasadena, Chabot, Space and Science Center, Fremont Peak, and the Stanford Linear Accelerator Center (registration fee may be requested)
- Extended observing hours on public nights and private observing sessions exclusively for CCAS members
- Assistance from club members, and other "how-tos" to help you best enjoy amateur astronomy and astrophotography

Questions about membership or other events?
Call Lee Coombs at (805) 466-2788 or visit our website at:

www.sloastro.org

How to Join

MEMBERSHIP APPLICATION

Membership is annual for each upcoming year, beginning when you first sign up. You can sign up online or mail in this form:

Membership Categories (Check one):

- ☐ \$15 Youth/Student
☐ \$15 Seniors
☐ \$20 Individual/Family

Magazine subscriptions Add specified amount to membership fee for a 1-year subscription.

- ☐ *Sky & Telescope* (+ \$33) only in September
☐ *Astronomy* (+ \$34) only available in September

Information: (PRINT CLEARLY!!)

Name(s) _____

Address _____

City _____

State, Zip _____

Home Phone _____

E-Mail _____

Newsletter Subscription:

You can choose E-Mail (recommended) or hard copy delivery for *Celestial Observer*. (check one)

- ☐ E-Mail (full color)
☐ Hard Copy (black & white)

Please make checks payable to Central Coast Astronomical Society and mail to P.O. Box 1415, San Luis Obispo, CA 93405.

