

# Celestial

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# Observer

Nov/Dec 2019



*The Moon on November 3<sup>rd</sup> 2019 – photo by David Majors*

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**Next Meeting:** No meetings in November or December.

Next meeting Jan. 23<sup>rd</sup> with guest speaker Dr. Rick Pogge on *Chasing Oxygen*, 7pm.

Free and open to the public!

**Next Star Gazing:** Saturday, Nov. 23<sup>rd</sup> and Dec. 21<sup>st</sup>, both at sunset at the new location at Santa Margarita Lake.

Visit our website for detailed directions and a map:

[www.CentralCoastAstronomy.org/starparty](http://www.CentralCoastAstronomy.org/starparty)

# CCAS Members Holiday Party!

Thursday, December 12th at 7PM  
1515 Fredericks Street, San Luis Obispo

## Ho! Ho! Ho!

All CCAS Members invited!

Please bring holiday goodies to share  
(we're having a dessert potluck).

Santa's coming with his bag of door prizes to give away!



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## Next Star Gazing

November 23, 2019, at sunset (4:50 PM) at the Santa Margarita Lake 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:

[www.CentralCoastAstronomy.org/starparty](http://www.CentralCoastAstronomy.org/starparty)



# CCAS Member's Work

Member Robin White shares images taken in October 2019 from Atascadero.



Member Peter Bresler share an image of the Orion Nebula and the Veil Nebula from October 2019.



# January 23<sup>rd</sup> Meeting: “Chasing Oxygen” with Prof. Rick Pogge from Ohio University

Wesley Room, 1515 Fredericks Street, San Luis Obispo

6:30pm Doors Open | 6:45 Refreshments | 7:00 Meeting Starts

Join us for a super-cool talk from our guest speaker, Dr. Pogge!

The Big Bang made only hydrogen and helium plus tiny traces of lithium and deuterium. This is why hydrogen and helium are the primary chemical elements that make up the universe today.



However, here on Earth, Oxygen is far and away the most abundant chemical element. Oxygen makes up about 46% of Earth’s crust, 22% of the air we breathe, and 65% of mass of the human body. Where was all of the Oxygen made? How is it distributed throughout the Galaxy and eventually find its way into planets and people? This talk will explore the origin of the elements heavier than helium in the universe, and describe how astronomers measure and map the distribution of Oxygen in interstellar space.

Prof. Pogge’s research has ranged from mapping the impact of active supermassive black holes on their host galaxies to searches for exoplanets.

Throughout his career he has worked on the design and construction of advanced astronomical instruments, including the development of software for image processing,

spectral analysis, and instrument control and data acquisition.

Most recently, Prof. Pogge led the building and commissioning of Ohio State’s twin Multi-Object Double Spectrographs for the Large Binocular Telescope. His current work uses the LBT to push the limits of precision spectrophotometry to measure element abundances in star formation regions and trace the chemical evolution history of galaxies, in particular the abundances of Oxygen and related elements.

**This event is free and open to the public.**

## **CCAS Videos!**

Make Your Telescope Easier To Use, by Tom Wallace  
CCAS Member Tom Wallace has created a number of videos on his youtube channel, including how to build a wood dolly for making your telescope more useful, how to set up a tripod, and more!

If you like these videos or have questions, be sure to let Tom know:

Tom Wallace  
tomwallaceghs@gmail.com

You can find these videos here:

<https://www.youtube.com/user/tomstda/>



### **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

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