April 2021

Sponsored by the Santa Barbara Museum of Natural History



Setting up at the Ritz-Carlton Bacara Resort. Photo credit: Tom Totton.

OUTREACH SUMMARY

Because of the ongoing pandemic, there was no inperson public telescope outreach in March. Please stay safe and healthy by wearing masks, washing your hands frequently, and practicing physical distancing. Get vaccinated when you can!

OUTREACH EVENTS

The SBAU radio hour has been replaced by a weekly Zoom/YouTube Live event every Monday at 11 AM. If you watch, the Live video should be able to take comments and questions in its Chat area: https://tinyurl.com/2vss2yam

For April, there will be no SBAU meetings, inperson public telescope outreach, or school events.

SEC TALK

The Science & Engineering Council has another astronomy-related lecture coming up. These are free since they are on Zoom.

Dr. Andy Howell of the Las Cumbres Observatory will speak on "New Insights into Exotic Explosions from Las Cumbres Observatory" on Wednesday, April 14 at noon: https://tinyurl.com/u48v96np>

SBAU members are welcome to attend

APRIL SKY

The ISS will be cruising through our evening sky from March 30 through April 8. To get the latest and most complete predictions, visit Heavens Above https://tinyurl.com/y5yt22ch

International Dark Sky Week will be held 5-12 April 2021. The week is hosted by the International Dark-Sky Association, a leading organization in combating light pollution. The week aims to generate awareness about light pollution, its negative consequences, and its solutions. The week also celebrates the night. People around the world are invited to join events to learn more about light pollution. Learn more here: < www.darksky.org>

April 22 is Earth Day. We've only got one planet, so let's take better care of it.

Mars is fading rapidly, but will have a nice telescopic/binocular conjunction with the rich open cluster M35 in the feet of Gemini on the evening of April 26.

In April and May, during prime observing hours, the bright band of our galaxy, the Milky way, is low around our horizon, so we are looking up out of the obscuring gas and dust in its plane into intergalactic space. This is the time to hunt down the distant faint fuzzies of the galaxy clusters in Leo, Coma Berenices, and Virgo.

FROM THE PRESIDENT

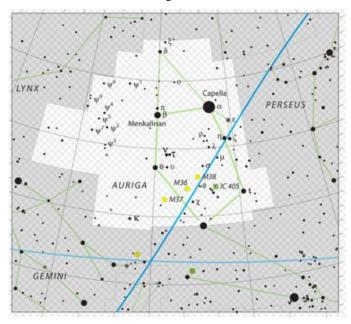
Jerry Wilson

We're in that period of the lunar cycle where the great sky lantern becomes the dominant light source of the night sky. Between first quarter and last quarter, observing or imaging of faint fuzzies can become problematic. For us central coast imagers, there are three things that need to line up to ply our craft. First are clear skies. Some seasons can be a total loss because of our marine layer or fog. Second is acceptable seeing, which means no wind. Finally, you need dark skies - no city lights and no moon.

A good fall back position to beat the monthly bright skies is to focus on star clusters. One of my favorite constellations is Auriga the Charioteer. Currently high in the Northwest after sunset, it boasts the bright, yellow-white star Capella. To my eye the asterism resembles a house. This time of year it's an upside down house.

The corners are marked by delta Aurigae as the peak of the roof. Capella (alpha) and Menkalinan (beta) as the base of the roof. The base of the east wall is Al Kab (iota), while the west wall consists of Bogardus (theta) and a star borrowed from neighboring Taurus, Elnath (beta Tauri).

Three beautiful open star clusters are resident. These are described by Astronomy magazine as: "M38 is a faint cluster that lies about halfway between Al Kab and Bogardus (Iota [ι] and Theta [θ] Aurigae); binoculars may pick it up, and a small scope certainly will. M36 is just over 2° northeast of Chi (χ) Aurigae. Smaller than M38, its light is more condensed and may be easier to see. Finally, you'll find M37 nearly 5° south-southwest of Theta, just one binocular field east of M36. The brightest stars in this cluster are around magnitude 9, so its light is a bit misty but discernible from the background."



Ocular Industries Solar Coronal Solution
Ocular Industries is proud to announce their latest product for the amateur astronomy community, our new Solar Coronal Filter Coating. Normally, one would have to wait for a total solar eclipse, or own an X-Ray telescope, to see the subtle patterns of the solar corona, the sun's outermost layer. But now, in an amazing confluence of biotechnology and

astronomy, our scientists at Ocular Industries have found a way to make corona viewing easy.

In a serendipitous discovery during the pandemic, when one of our employees sneezed while cleaning a Hydrogen-alpha solar telescope, we saw that the spike protein of the SARS-CoV-2 virus, specifically the 04.01.2021 variant, causes diffraction of the H-alpha spectrum in a precise way that transmits only the solar coronal emanations undisturbed.

Coating the back surface of the etalon filter in your Coronado or Lunt Systems solar telescope with our patented, easy application viral solution will open up a whole new viewing opportunity for solar enthusiasts.

Our Solar Coronal Solution comes as a vial of live virus, sufficient for 10 applications. You must be at least 18 years old, and provide proof of vaccination to order. Please read the enclosed handling and care instructions carefully. May void your telescope warranty.

ARTS CORNER

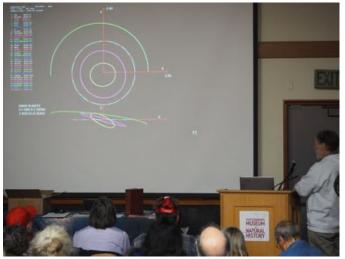
On Not Posting the Bees to Instagram Tess Taylor

Impossible to photograph the bees in the lavender. Even trying to soon felt ridiculous. They were so busy, so out of focus that I put down the camera & let myself linger realizing as I did the sheer pleasure of hearing their thrum in the blossoms. of glimpsing their dizzy gold-on-purple bodies weaving summer's brocade, a diadem buzzing pollen & light. I have no photo. Perhaps you will ponder this note instead? I did want to celebrate the bees in their loudness:

I did want to broadcast my joy.



"All together, now. Old MacDonald had a farm..." Photo credit: Tom Totton.



"That's right. I generated these Keplerian orbitals using an Etch-a-Sketch." Photo credit: Tom Totton.



"All right, Tim. Cut the comedy!" Photo credit: Tom Totton.

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AU AstroNews, the monthly publication of the **Astronomical Unit (AU)**, is mailed to the AU membership. For publishing consideration for the next month, submit astronomical items by the 20th of the current month!

AU annual membership rates: Single = \$20 Family = \$25

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The Astronomical Unit

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April 2021						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4 LQ Moon	5 Dark	6	7 Sky	8	9 Week	10
11 New Moon	12	13	14	15	16	17
18	19 FQ Moon	20	SEC TALK NOON	22	23	24
	FQ MOON			Earth Day		
25	26 FULL MOON MARS AND M35 IN CONJUNCTION	27	28	29	30	