



AU AstroNews

The Newsletter of the Astronomical Unit

September 2023

Sponsored by the Santa Barbara Museum of Natural History



Setting up for a "Second Saturday" viewing at the SBMNH.
Photo credit: Tom Totton.

OUTREACH SUMMARY

SBAU volunteers must have undergone the SBMNH background check, and conform with the SBMNH policies for dealing with the public, to participate in outreach activities. To get vetted, contact SBMNH Volunteer Manager Rebecca Coulter <rcoulter@sbnature2.org>. It's quick and painless.

Since the last newsletter, certified SBAU/SBMNH volunteers Brandy Ackerman, Tim Crawford, Joe Doyle, Tessa Flanagan, Sean Fox, Art Harris, Ron Herron, David Larson, Pat & Chuck McPartlin, Janet & Martin Meza, Bruce Murdock, Ron Nixon, Edgar Ocampo, Javier Rivera, Charles Schueler, Tom Totton, Tom Whittemore, Pat Forgey & Jerry Wilson, John Winckowski & Quasars, and Andre Yew showed the sky to **2375** guests. David Feinberg, Jen Ito, Ken Kihlstrom, and Neal Malone helped out.

OUTREACH EVENTS

FRIDAY, SEPTEMBER 1, 7 PM

Quick planetarium show, then at 7:30, our monthly meeting in Fleischmann Auditorium at SBMNH. This will be a hybrid meeting, also on Zoom. Watch your email or find the link on the SBAU web page. Our speaker will be Dr. John Callas of JPL on "The Dark State of the Cosmos".

SATURDAY, SEPTEMBER 2, SETUP 7 PM

Telescopes for campers at Refugio State Beach, setup in the southwest corner of the day use parking lot. Chuck and Pat will not be able to attend, so if you can, please come out and help!

THURSDAY, SEPTEMBER 7, SETUP 7 PM

Telescopes for the Ritz-Carlton Bacara. We set up on the blufftop lawn by the Angel Oak restaurant. Chuck and Pat will not be able to attend, so if you can, please come out and help!

SATURDAY, SEPTEMBER 9, 5 PM

AU monthly planning meeting on Zoom. Watch your email for the link.

SATURDAY, SEPTEMBER 9, SETUP 7 PM

Monthly Public Star Party at SBMNH, next to Palmer Observatory, 8 to 10 PM. Chuck and Pat will not be able to attend, so if you can, please come out and help!

WEDNESDAY - SUNDAY, SEPTEMBER 13 - 17

Annual CALSTAR Star Party in the overflow campsite at Lake San Antonio.

THURSDAY, SEPTEMBER 14, SETUP 7 PM

Telescopes for the Ritz-Carlton Bacara. We set up on the blufftop lawn by the Angel Oak restaurant.

FRIDAY, SEPTEMBER 15, SETUP 7 PM

Monthly Public Telescope Night at Westmont, at their Keck Observatory, next to the athletic fields.

THURSDAY, SEPTEMBER 21, SETUP 7 PM

Telescopes for the Ritz-Carlton Bacara. We set up on the blufftop lawn by the Angel Oak restaurant.

TUESDAY, SEPTEMBER 26, SETUP 7 PM

Telescope Tuesday at the Camino Real Marketplace, in the plaza by the theater.

THURSDAY, SEPTEMBER 28, SETUP 7 PM

Telescopes for the Ritz-Carlton Bacara. We set up on the blufftop lawn by the Angel Oak restaurant.

FROM THE PRESIDENT

Jerry Wilson

“The universe is not only stranger than we imagine; it is stranger than we can imagine.” This quote has been attributed to: Arthur Eddington; J. B. S. Haldane; Werner Heisenberg; Arthur C. Clarke; Stanley Kubrick; and J. B. Priestly. We clearly have been able to figure part of how the universe works since we now use the classical dynamics of Sir Isaac Newton to put spacecraft in orbit, land them on the moon and Mars, and send two into interstellar space.

Most of the really belief-defying knowledge comes with the development of Relativity and Quantum Mechanics in the twentieth century. Each field has its counterintuitive twists. As humans, we build up our world from what we are familiar with. The stuff we try to use as building blocks of our reality come from human scales of experience. Quantum Mechanics and Relativity are mathematical extensions of observations into the realms of higher speeds or smaller scales than we can become used to by our raw sensory input alone.

These two fields were developed to address very slight inadequacies in our previous knowledge. The math opened up whole new realities. We have now looked inside the box where we live and we have accounted for much of it. We looked back as far as we can into the Cosmic Microwave Background and we have seen the small things that make up the subatomic world.

There are new slight inadequacies that tell us we are not done yet. We measure contradictory Hubble Constants, inaccuracies in muon magnetism, with JWST unexpected images in the early universe, and the biggest inadequacy of all in the union of Quantum Mechanics and General Relativity. Relativity describes a continuous field (non quantized) while Quantum Mechanics demands quantization.

Although we are only scratching the surface of things, these are exciting times.

ARTS CORNER

Screech Owl (2004)

Ted Kooser

All night each reedy whinny
from a bird no bigger than a heart
flies out of a tall black pine
and, in a breath, is taken away
by the stars. Yet, with small hope
from the center of darkness
it calls out again and again.

Falling a Little Bit in Love With the Dark

Margaret Renkl

(excerpted from the December 21, 2022 NYT)

This year the winter solstice arrives on Dec. 21 in the shank of the dark afternoon. Officially the first day of astronomical winter, the solstice is better known as the shortest day of the year. I prefer to think of it as the longest night of the year, for I am making friends with the darkness.

For most of my life, I looked forward to the solstice because it signals a shift to longer days. I was never a fan of winter, and earlier sunrises and later sunsets always felt to me as a kind of compensation for the cold. But my heart has been thawing these past years, watching as winter becomes ever more fragile, its cold imperiled by the changing climate, its darkness by our own foolishness and fear.

With the arrival of LED lighting, which costs so little to burn, every house has become an island of illumination, every city a blazing forest fire of artificial light. In my own backyard, it's hard to enjoy the full moon because so many of our neighbors now leave their lights on all night long. And that's without the holiday displays, each one bright enough to guide an airplane from the sky and land it safely in the middle of our street.

This resolve to snuff out every shadow of night – I wonder how closely it might be linked to the metaphorical darkness of our age. Discord, suffering and sorrow are everywhere, all much darker than any winter night, and tilting Earth is not to blame for them. It's not hard to understand what's really to blame: Media and political figures alike profit when we are angry or afraid.

Literal darkness is simple by comparison, but people inclined to flood their own yards with light for safety's sake seem not to know how little safety they've provided themselves or what measures of actual safety they have closed off in the attempt. They will never know what dangers might lurk beyond their own little circle of light because they've created the very circumstances that prevent their eyes from adjusting to darkness.

A Letter from Never Before

Ted Kooser

It arrived with the rest of the mail
in our box by the road, came
bearing a standard Forever stamp.

a little American flag, and the letter
handwritten in pencil. "You don't
know me," it opened. "Never before

have I written to you...." It had a quaint
syntax, its rhythm like that of
a waltz that was ever so gracefully

taking me into its arms. It had no
past to offer, only the present, as if
everything started from there,

with that Never Before, and this
on such an ordinary day, a few clouds,
birds flying high in the clouds,

then this, a few words of thanks,
carefully chosen and shaped
with a No. 2 pencil, which I knew

had been recently sharpened,
all this from a stranger, setting out
for Forever from Never Before.

AU Information Box

President: Jerry Wilson 252-2206
jerryawilsonphd@gmail.com

Vice President: Ron Herron
vicepresident@sbau.org

Secretary: Pat&Chuck McPartlin 964-8201
secretary@sbau.org

Treasurer: Colin Taylor 967-8140
dancingmagpie@cox.net

Equipment: Tom Totton 562-8795
equipment@sbau.org

Outreach: Chuck McPartlin 964-8201
outreach@sbau.org

Newsletter: Tom Whittemore 687-2025
kometes@aol.com

Webmaster: Tom Totton 562-8795
webmaster@sbau.org

Merch Manager: Pat McPartlin 964-8201
parsnip7@yahoo.com

SBMNH Astronomy Programs Manager

John Winckowski 682-4711 ext. 164
jwinckowski@sbnature2.org

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 rate: \$20

AU mailing address:

Astronomical Unit
c/o Santa Barbara Museum of Natural History
2559 Puesta Del Sol Road
Santa Barbara, CA 93105-2998

On the Web: <http://www.sbau.org/>

The Astronomical Unit

c/o Santa Barbara Museum of Natural History
 2559 Puesta Del Sol Road
 Santa Barbara, CA 93105-2998

SEPTEMBER 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 "HYBRID" AU MONTHLY MEETING 7PM	2 REFUGIO STATE BEACH 7PM
3	4	5	6	7 LQ MOON RITZ-CARLTON BACARA 7PM	8	9 ZOOM PLANNING MEETING 5PM STAR PARTY 7PM
10	11	12	13 CALSTAR	14 NEW MOON RITZ-CARLTON BACARA 7PM CALSTAR	15 WESTMONT PUBLIC STAR PARTY 7PM CALSTAR	16 CALSTAR
17 CALSTAR	18	19	20	21 FQ MOON RITZ-CARLTON BACARA 7PM	22	23
24	25	26 "TELESCOPE TUESDAY" AT CAMINO REAL MARKETPLACE 7PM	27	28 RITZ-CARLTON BACARA 7PM	29 FULL MOON	30