



AU AstroNews

The Newsletter of the Astronomical Unit

February 2023

Sponsored by the Santa Barbara Museum of Natural History



Tim Crawford sets up for a night full of stars. Photo credit: Tom Totton.

OUTREACH SUMMARY

Lots of clouds and rain in January, but AU volunteers Tim Crawford, Tessa Flanagan & Duff Kennedy, Art Harris, Pat & Chuck McPartlin, Janet & Martin Meza, Charles Schueler, Tom Totton, Tom Whittemore, and Andre Yew showed cool stuff in the sky to 688 people, helped by Dr. Sommermann and Dr. Ito at Westmont.

SBAU volunteers must be fully vaccinated and boosted, and have undergone the SBMNH background check to participate in outreach activities. To get vetted, contact SBMNH Volunteer Manager Rebecca Coulter

<rcoulter@sbnature2.org>. It's quick and painless.

OUTREACH EVENTS

Lots of school events in February. Help out if you can!

WEDNESDAY, FEBRUARY 1

Comet C/2022 E3 (ZTF) closest to Earth, at its brightest, and circumpolar!

THURSDAY, FEBRUARY 2, SETUP 5 PM

Telescopes for Science Night at Brandon School, 195 Brandon Drive in Goleta.

FRIDAY, FEBRUARY 3, 7 PM

Monthly AU meeting in Farrand Auditorium at SBMNH. Another hybrid Zoom/in person meeting. Short planetarium show at 7 PM, followed by a talk on Space Weather by Dr. Joseph Bassi.

THURSDAY, FEBRUARY 9, SETUP 5 PM

Telescopes for Science Night at Monte Vista School, 730 N Hope Avenue in Santa Barbara.

FRIDAY, FEBRUARY 10, SETUP 5 PM

NUTS, Night Under The Stars at Santa Ynez Elementary, 3325 Pine Street in Santa Ynez. This is the school at the west end, near Calzada Avenue.

SATURDAY, FEBRUARY 11, 5 PM

Monthly AU planning meeting via Zoom. Find the link on the SBAU web page.

SATURDAY, FEBRUARY 11, 7 PM

Monthly public star party at SBMNH, by the Palmer Observatory.

WEDNESDAY, FEBRUARY 15, SETUP 6 PM

Telescopes for SB Community Academy, 850 Portesuello Ave in Santa Barbara. We set up between the parking lot and the playing fields on the south side of campus, next to the picnic tables.

THURSDAY, FEBRUARY 16, SETUP 5 PM

Telescopes for STEM night at Hope School, 3970-A La Colina Road in Santa Barbara. We set up on the playground blacktop, accessed through the far end of the parking lot.

FRIDAY, FEBRUARY 17, SETUP 6 PM

Monthly public telescope night at Westmont's Keck Observatory.

THURSDAY, FEBRUARY 23, SETUP 4:30 PM

Telescopes for Science Night at Ellwood School, 7686 Hollister Avenue in Goleta.

TUESDAY, FEBRUARY 28, SETUP 7 PM

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



“Gosh. You’re right, Pat. The meatloaf is just teeming with ants!” Photo credit: Tom Totton.

FROM THE PRESIDENT

Jerry Wilson

This Year will be an exciting year for space programs from several different countries. Developing new hardware and systems will be tested for use in future missions; new missions will be launched and one old mission will conclude. The following is an excerpted list of activities from the on-line issue of Astronomy Magazine for January 2023.

1. Asteroid Bennu samples return to Earth. Way back in 2016, NASA launched its OSIRIS-REx mission. The craft arrived at the asteroid Bennu in October 2020 to collect rock samples. OSIRIS-REx is estimated to return to Earth with the samples on Sept. 24, 2023, though that date could change as the year progresses.

2. SpaceX and Boeing send humans to space. As 2023 rolls around, Boeing and SpaceX will continue to compete to launch humans into Space as a part of NASA’s Commercial Crew Program (CCP). In February, SpaceX will attempt its sixth launch for the CCP, sending four astronauts to the International Space Station. In April Boeing will be attempting the first crewed launch of its Starliner craft, including two NASA astronauts. This launch will mark the final test that Boeing needs to pass before it can use the Starliner to regularly send astronauts to the ISS.

3. Multiple countries shoot for the Moon. As of late 2022. Russia plans to launch their Luna Lander in 2023. The craft will attempt to land near Boguslawsky crater in the Moon’s south polar region to study components of the lunar polar

exosphere. India aims to launch its third lunar mission in mid- to late-2023. The Chandrayaan 3 will land in the highlands near the south pole of the Moon. Finally, two lunar landers will launch from the U.S. in 2023. The Houston-based company Intuitive Machines’ Nova-C craft will take off in March 2023. Meanwhile, Astrobotic Technology’s Peregrine Lunar Lander is tentatively scheduled to touch down on the Moon’s surface in the first quarter of 2023.

4. Europe’s JUICE Mission to Europa (and more). In April 2023, the European Space Agency will send their Jupiter Icy Moons Explorer, or JUICE, off to Jupiter. Upon entering orbit around Jupiter in 2031, JUICE will make detailed observations of the gas giant’s three large ocean-bearing moons: Ganymede, Europa and Callisto. JUICE will fly by Ganymede and Callisto at least 12 times each, and Europa at least twice. In the final phase of its projected two-year mission, JUICE will orbit around Ganymede for about nine months studying the moon even more closely. This will mark the first time a spacecraft has orbited around another moon in the solar system other than our own Moon.

5. SpaceX sends its Starship spacecraft. In late February or March, SpaceX will attempt to use its Super Heavy first-stage rocket booster to launch its second-stage spacecraft, Starship, into orbit. The two are collectively referred to as “Starship,” and the company plans to use them in the future as a fully reusable transportation system for both cargo and humans.

ARTS CORNER

Bread

Ted Kooser

I saw a man coming out of a day-old baked goods store with two white plastic bags of something, held out like the pans on a jeweler’s scale that he was becoming as he turned and walked away, presenting his back and the outstretched beams of his arms with their bags of bread or pastries suspended, an overlarge man rocking, too, the one on his right side lifting a little when his weight settled onto his left foot, and vice versa. Whatever was in those bags, or on that scale, he was clearly a man on balance with himself, who knew exactly how much of his life he was weighing and what it had cost as, with an extra tip of the fulcrum, swinging his bags, he rocked around the corner drugstore and was gone.

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.

An Overnight Snow

Ted Kooser

Before walking to work, and in still-falling snow,
my father in hat, suit, topcoat, and galoshes
would scoop our sidewalk. Only a few sounds
came in to me out of the predawn darkness:
the scrapes of not one but two shovels, each scrape
with a tap at the end to knock off the snow, then
a word or two, muffled, back and forth between
my father and our next-door neighbor, Elmo Mallo,
who was out shoveling, too. And later, after both
had gone to work and I’d be setting out for school,
I’d see their boot prints – I can see them still, after
seventy years – my father’s on one side of the line
where their shovels met, and Mr. Mallo’s on the other.

AU Information Box

President: Jerry Wilson 968-4056
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: Art Harris 968-4017
n6is@cox.net

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 Specialist

Krissie Cook 682-4711 ext. 164
kcook@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 rates:
Single = \$20 Family = \$25

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

February 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2 BRANDON SCHOOL 5PM	3 "HYBRID" AU MONTHLY MEETING 7PM	4
5 FULL MOON	6	7	8	9 MONTE VISTA SCHOOL 5PM	10 SANTA YNEZ ELEMENTARY 5PM	11 ZOOM PLANNING MEETING 5PM STAR PARTY 7PM
12	13 LAST QUARTER	14	15 SB COMMUNITY ACADEMY 6PM	16 HOPE SCHOOL 5PM	17 WESTMONT PUBLIC STAR PARTY 6PM	18
19 NEW MOON	20	21	22	23 ELWOOD SCHOOL 4:30PM	24	25
26 FIRST QUARTER	27	28 CAMINO REAL MARKETPLACE 7PM				