



# AU AstroNews

## The Newsletter of the Astronomical Unit

November 2024

Sponsored by the Santa Barbara Museum of Natural History



*Mike Chibnik captured this self-image as he set up for a photo of Comet Tsuchinshan - ATLAS.*

### **SBAU ELECTION**

Our annual election is coming up on December 6. If you are interested in serving as an officer in the club, contact Vice President Ronnie Herron at [<brherron@gmail.com>](mailto:brherron@gmail.com) Positions and their duties are detailed on the SBAU web page.

### **OUTREACH SUMMARY**

Since the last newsletter, certified SBAU/SBMNH volunteers Brandy Ackerman, Henk Aling, Andy Allen, Tim Crawford, Joe Doyle, Owen Duncan, David Feinberg, Tessa Flanagan, Rosina Garcia, Brian Green, Ronnie Herron, Sean Kelly, David

Larson, Mike Lawson, Pat & Chuck McPartlin, Janet & Martin Meza, Bruce Murdock, Ron Nixon, Cez & Tom Totton, Chuck Watson, Tom Whittemore, Lee Wilkerson and Andre Yew showed the sky to 827 viewers, helped by Jen Ito & Westmont physics students, Rick, Makio, Karen, and Cecelia.

### **OUTREACH EVENTS FOR NOVEMBER**

*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>](mailto:rcoulter@sbnature2.org). It's quick and painless.*

*School events are ramping up. Please come out and help if you can - it's a lot of fun showing Saturn and Jupiter to students.*

### **FRIDAY, NOVEMBER 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. Jen Ito of Westmont, on measuring the polarization of the Cosmic Microwave Background.

### **SUNDAY, NOVEMBER 3, 2 AM**

Daylight Saving Time ends. Fall Back one hour.

### **WEDNESDAY, NOVEMBER 6, SETUP 5 PM**

Telescopes for Santa Barbara Community Academy, 850 Portesuello Avenue. We set up by the field to the S of the main building, with entrance off of Portesuello.

**THURSDAY, NOVEMBER 7, SETUP 5 PM**

Telescopes for Coastline Christian Academy in Golets at 5950 Cathedral Oaks.

**SATURDAY, NOVEMBER 9, 4:30 PM**

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

**SATURDAY, NOVEMBER 9, SETUP 6 PM**

Monthly Public Star Party at SBMNH, next to Palmer Observatory, 7 to 10 PM.

**TUESDAY, NOVEMBER 12, SETUP 7 PM**

Telescope Tuesday at the Camino Real Marketplace, in the plaza by the theater. **Pat & Chuck can't attend, so please come out with a scope if you can.**

**THURSDAY, NOVEMBER 14, SETUP 5:15 PM**

Telescopes for Peabody Charter School, 3018 Calle Noguera. We enter through a gate on the SW side of campus, off Calle Granada.

**FRIDAY, NOVEMBER 15, SETUP 6 PM**

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

**THURSDAY, NOVEMBER 21, SETUP 7 PM**

Telescopes for Hope School, 3970A La Colina Road. We enter through a gate at the end of their parking lot to set up on the blacktop playground.

***SBAU Year-end Holiday Party for members!***

***Friday December 13th, 2024.***

***Timbers Restaurant, Goleta***

***\$40.00 per person. RSVP required by December 8th, 2024***

***Details to be sent out to members via e-mail.***

**FROM THE PRESIDENT**

*Jerry Wilson*

*(This is an excerpt from an article on Astronomy Magazine's web site.)*

In a teleconference Oct. 15, representatives from NASA and the National Oceanic and Atmospheric Administration (NOAA) announced that the Sun has reached the peak level in its current cycle of activity — the 25th for which humans have kept detailed records. The 25th cycle has been far more active than the previous one, especially this year, when auroral shows have delighted skywatchers around the world.

Solar cycles last roughly 11 years, moving slowly between periods of high activity — which can include sunspots, solar flares, coronal mass ejections, and more — and calmer, less active periods. The cycles are uneven and difficult to predict, though. Previous cycles have lasted as little as nine or as long as 14 years, and day-to-day, solar weather is just as difficult to predict as Earthly weather.

The metric by which solar cycles are measured relies on counting sunspots, which are dark areas on the Sun that are cooler than their surroundings.

They usually last days to weeks and often appear in groups. They also correlate to many other kinds of solar weather, all of which stem from tangles and knots in the Sun's powerful magnetic field.

Indeed, the solar cycle is an indication of when the Sun, which is a giant magnet, flips its polarity. In its quieter phases, the Sun is a well-behaved dipole — that is, a magnet with a North Pole and a South Pole, like a bar magnet. But over the course of a solar cycle, the Sun's outer layers are churned by a phenomenon called differential rotation — the fact that the Sun's plasma rotates faster at its equator than at its poles. As a result, the magnetic field becomes more twisted and complex, causing the chaos and activity we see now. Eventually, the Sun's polarity flips entirely and our star returns to its more placid phase.



*“That’s funny. About fifteen minutes ago there was a party of four seated at the table when a flying saucer landed on the grass.” Photo credit: Tom Totton.*

## **ARTS CORNER**

### **IN THE BIG ROCK CANDY MOUNTAINS**

*-Harry McClintock*

In the Big Rock Candy Mountains  
 There’s a land that’s fair and bright  
 Where the hand-outs grow on bushes  
 And you sleep out every night;  
 Where the box cars all are empty,  
 Where the sun shines every day  
 On the birds and the bees  
 And the cigarette trees,  
 And the lemonade springs  
 Where the bluebird sings -  
 In the Big Rock Candy Mountains.

### **POLARIS**

*Catherine Abbey Hodges*

Bees work the vetch, moths tryst  
 in the jasmine, and on it turns the world  
 replenished like a well  
 in blues and greens and wings while leaves  
 like needles, minnows, hosts, hands  
 conjure oxygen.  
 Near the center of each nasturtium leaf  
 a north star. Here the heavens  
 pivot, certain engines catch.

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### **SBMNH Astronomy Programs Manager CURRENTLY VACANT**

**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:**

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# The Astronomical Unit

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NOVEMBER 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 NEW MOON SBAU MEETING 7PM	2
3 DST ENDS AT 2AM FALL BACK!	4	5	6 SB COMMUNITY ACADEMY 5PM	7 COASTLINE CHRISTIAN 5PM	8 FQ Moon	9 ZOOM PLANNING MEETING 4:30PM STAR PARTY 6PM
10	11	12 CAMINO REAL MARKETPLACE 7PM	13	14 PEABODY CHARTER 5:15PM	15 FULL MOON WESTMONT PUBLIC STAR PARTY 6PM	16
17	18	19	20	21 HOPE SCHOOL 7PM	22	23 LQ Moon
24	25	26	27	28	29	30 New Moon