

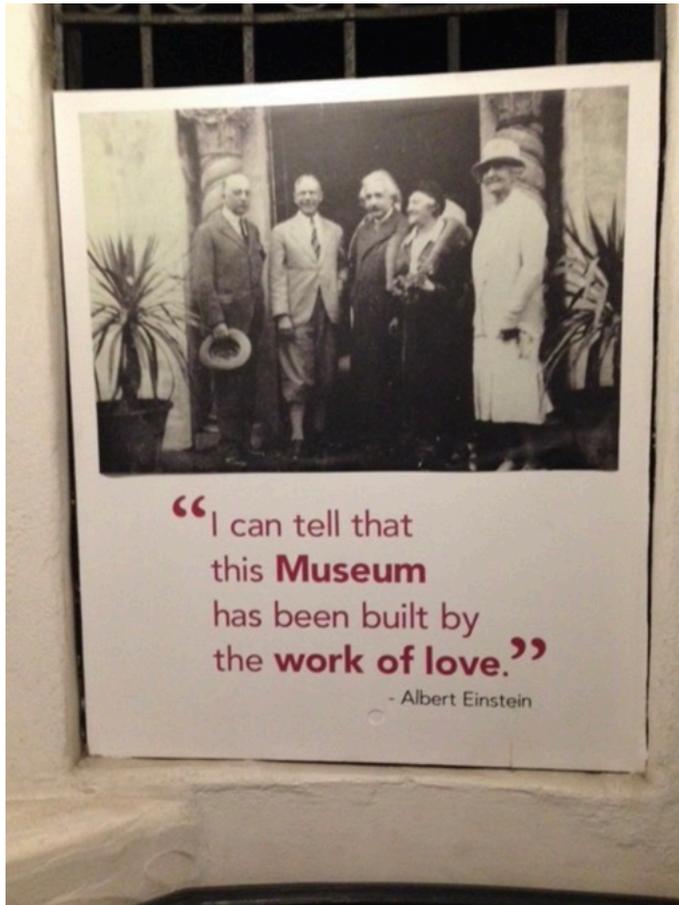


# AU AstroNews

The Newsletter of the Astronomical Unit

January 2026

Sponsored by the Santa Barbara Museum of Natural History



*This historic and wonderful photo of Albert Einstein and museum visitors hung along the walkway at the Santa Barbara Museum of Natural History. Photo: Tom Whittemore.*

## SAD NEWS

SBAU member Bruce Murdock passed away on December 18.

## SBAU ELECTION RESULTS

Jerry Wilson remains President, Ronnie Herron remains Vice President, Pat McPartlin remains Treasurer, and Mike Lawson is our new Secretary. Appointed positions remain the same.

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

Since the last newsletter, SBAU volunteers Andy Allen, Melissa Cohen, Krissie Cook, Tim Crawford, Tessa Flanagan, Brian Green, Art Harris, David Larson, Mike Lawson, Pat & Chuck McPartlin, Mary Migrant, Janet & Martin Meza, Marlin & Bruce Murdock, Edgar Ocampo, Michael Robertson, Charles Schueler, Sohini Sengupta, Tom Totton, Chuck Watson, Tom Whittemore, Lee Wilkerson, and Greg Wittmann showed cool astronomy stuff to 775 people, helped out by Dr. Jen Gee, David Grossman, Mark Groves, and Matt Hall.

## OUTREACH EVENTS

### FRIDAY, JANUARY 2, 6 PM

AU monthly meeting in Farrand Hall at SBMNH. \*\*\* NOTE NO LONGER ZOOMED \*\*\*  
SBAU merchandise sales at 6 PM. Quick planetarium show at 6:30, AU business meeting at 7, then at 7:30, our speaker will be UCSB Physics Professor Dr. Crystal Martin, on Cosmic Dawn: When Galaxies Were Young. We end promptly at 9 PM.

### SATURDAY, JANUARY 3, 9 AM

Earth is at perihelion, closest to the Sun for the year.

### SATURDAY, JANUARY 10, 4 PM

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

### **SATURDAY, JANUARY 10, SETUP 6:30 PM**

Monthly Public Star Party at SBMNH, at Palmer Observatory from 7:30 to 10 PM.

### **FRIDAY, JANUARY 16, SETUP 5 PM**

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

### **TUESDAY, JANUARY 20, SETUP 7 PM**

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

### **THURSDAY, JANUARY 22, SETUP 4:30 PM**

Telescopes for Science Night at Roosevelt School, 1990 Laguna Street.

### **FRIDAY, JANUARY 23, SETUP 5:30 PM**

Telescopes for students and family from Fusion Academy. We'll set up at the east end of Shoreline Park.

### **TUESDAY, JANUARY 27, SETUP 6 PM**

Telescopes for an Astronomy Night at Santa Barbara Junior High School, 721 E Cota Street. We set up behind the Marjorie Luke Theater on campus.

### **FROM THE PRESIDENT**

*Jerry Wilson*

There are currently several comets in the sky. Some are prominent and can be seen with the naked eye, while others are quite faint. They all make excellent and dramatic astroimages. But the fainter ones present issues that are unique in astroimaging.

Exposure times for fainter sky objects frequently run into hours. The total exposure does not need to be taken at once. Images can be broken up into subframes which are then stacked to get the effect of a single long exposure. I typically use 12 to 24 subframes of 5 or 6 minutes each. I then pick about 7 stars across the field of view and line them up as registration marks, to make the final image.

During each subframe, my equipment tracks the sky so the stars show up as tiny round dots. Everything in the frame tracks with the stars. But with comets, the stars and the comet do not track at the same rate so they don't line up from subframe to the next. If I track on the stars, the comet will move, but if I track on the comet the stars show up as streaks or a short line of dots. Getting them each to look good between subframes is surprisingly tricky.

The SBAU's Tuesday evening Telescope Workshop Zoom meeting, we discussed ways to do this recently over a couple of weeks. One technique, contributed by Chuck Watson, and now known as the Watson technique, is to take a series of subframes tracking on the comet, then use software to subtract all the stars. Next, line up all the comet subframes into a single image and add it to a background star field taken at a later date when the comet has moved on.

Another technique discussed is to take subframes with exposures short enough so nothing blurs. Then using available software separate each subframe into a comet frame, by removing the stars, and a star frame by removing the comet. Combine each stack, then add the comet image to the star field as if it were passing through.

If you're interested in seeing detailed recipes for these processes, please tune in Tuesday evenings between 7:30 and 9:00 PM. You can get the meeting ID and password from our Webmaster Tom Totton.

### **SBAU ANNUAL HOLIDAY PARTY 2025**

*Diane Welcenbach*



*Photo courtesy of Diane Welcenbach*

The SBAU club hosted their Holiday party at the beautiful Hilton Garden Inn, El Capitan ballroom. The event was well attended. The weather was summerlike which made it fun to sit outside on the patio under the stars watching the fire pit while enjoying appetizers. People were also socializing at the full bar just outside the ballroom. The section of

the hotel for the SBAU event was very private and quiet. The ballroom was very spacious. The large screen was amazing to view the slideshow presented by Tom Totton.

The buffet was lovely, offering a delicious menu. Coffee and tea were available. The desserts included cheese cake or chocolate brownie.

The fun was just beginning - Astronomy Trivia! Tom and Cezanne Totton handed out an “Easier” trivia quiz and an “Advanced” quiz. People could test their knowledge – or learn something new.

Tom reviewed the answers after dinner. Thanks to both of them for taking the time to put that together.

Next was the white elephant gift exchange. Chuck McPartlin was the MC keeping things on track. The rule of the game was a gift can be stolen only once. One member – David Grossman – kept getting his gift stolen. He ended up having to pick five gifts! It was very fun.

It was a nice way to end the year. Thanks to all the members who attended.

### **SBAU 2025 OUTREACH SUMMARY**

For the 2025 calendar year, we had 198 scheduled events, some of which were clouded or smoked out. Thirty six members earned Night Sky Network pins for participating at six or more outreaches, resulting in 26 membership extensions for a year. Total attendance by the public was 16,591, bringing our total since 2003 to 287,208. We’re well past the Moon on our goal to reach 93 million!

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

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JANUARY 2026						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2 GENERAL MEETING 6PM	3 FULL MOON EARTH AT PERIHELION 9AM
4	5	6	7	8	9	10 LQ MOON ZOOM PLANNING 4PM STAR PARTY SETUP 6:30PM
11	12	13	14	15	16 WESTMONT 5PM	17
18 NEW MOON	19	20 CAMINO REAL MARKETPLACE 7PM	21	22 ROOSEVELT SCHOOL 4:30PM	23 FUSION ACADEMY 5:30PM	24
25 FQ MOON	26	27 SANTA BARBARA JUNIOR HIGH 6PM	28	29	30	31