



AU AstroNews

The Newsletter of the Astronomical Unit

March 2025

Sponsored by the Santa Barbara Museum of Natural History



Tim Crawford shows off the night sky with his recently-modified 6" reflector. Photo credit: Tom Totton.

OUTREACH SUMMARY

SBAU volunteers Andy Allen, Krissie Cook, Tim Crawford, Tessa Flanagan, Brian Green, Art Harris, Rosina Garcia, Ronnie Herron, Sean Kelly, David Larson, Pat & Chuck McPartlin, Bruce Murdock, Javier Rivera, Tom Totton, Tom Whittemore, Lee Wilkerson, and Andre Yew showed cool stuff in the sky to **1254** people, helped by Jason from VCAS.

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.

OUTREACH EVENTS

TUESDAY, MARCH 4, SETUP 7 PM

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

THURSDAY, MARCH 6, SETUP 4:30 PM

Telescopes for Science Night at Hollister Elementary School, 4950 Anita Lane. We set up on the blacktop, with access through a gate at the end of Ashton Street. Food for volunteers.

FRIDAY, MARCH 7, 7PM

Quick planetarium show, then our monthly meeting in Fleischmann Auditorium at SBMNH, also on Zoom. Our speaker will be Dr. Jeff Bennett, speaking on the search for extraterrestrial life.

SATURDAY, MARCH 8, 4 PM

SBAU Monthly Planning Meeting on Zoom. Watch your email for the link.

SATURDAY, MARCH 8, SETUP 6:30 PM

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

Sunday, March 9 - Daylight Saving Time starts.

WEDNESDAY, MARCH 12, SETUP 5 PM

No Moon, no darkness, Science Night at Monroe School, 431 Flora Vista Drive. Food for volunteers. We set up on a lawn next to the library.

THURSDAY, MARCH 13, SETUP 4:30 PM

No Moon, no darkness, but Science Night at Hope School, 3970A La Colina Road. Food for volunteers. We set up in the courtyard by the office.

THURSDAY/FRIDAY MARCH 13/14, SETUP 10 PM

Telescopes for a Total Lunar Eclipse at Camino Real Marketplace, in the plaza by the theater. Totality lasts from 11:27 PM to 00:34 AM.

Thursday, March 20 - Spring begins with the Vernal Equinox.

FRIDAY, MARCH 21, SETUP 6 PM

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

SATURDAY, MARCH 22, SETUP 7 PM

Telescopes for a group of scouts camping in the Chumash Meadows group site at Cachuma Lake. You may be charged admission at the entry kiosk, so keep your receipt for reimbursement.

FROM THE PRESIDENT

Jerry Wilson

Science. What exactly is science?

Science is a process for discovering knowledge about how natural systems work. It's a way of questioning Nature about how she works. It is not a catalog of answers. That is scientific knowledge.

The process is: Start with a hypothesis, or an observation, or a question, or a postulate, or a hunch, or an inspiration.

Famous starting hypotheses include: The Earth is the center of the solar system; The Sun is the center of the solar system; The Earth is flat; The Earth is round, There is an absolute time; There is no absolute time; The speed of light is always "c" no matter how fast you move.

Next, describe the hypothesis mathematically and, by deduction, derive observable consequences.

Finally, set up experiments or make observations to see whether the derived consequences actually occur. Corollary: it's a good idea to publish your work and get critical feedback.

The scientific process is a product of the Age of Enlightenment. This process begins in the Renaissance and it brought the Dark Age of European history to a close.

Scientific description of the universe is not the final answer; it answers the question asked correctly in the context of the question.

For example, Isaac Newton formulated his three laws of motion based on his insightful observations of his immediate surroundings. Observations of falling objects, including the Moon, but always with the hidden belief in the existence of an absolute time. Newtonian dynamics, published in 1666, are correct for the velocity, mass, and range of physical experience explored. We use them today to successfully land rovers on Mars.

In 1917 Albert Einstein examined higher velocities and heavier masses based on the postulate that time is relative to the observer. This showed that Newton's work was a special case of a more general theory. *It was not wrong.*

Prior to the formalization of science, people did a form of evolved problem-solving based on their belief system. Our five senses provide a stream of information to our brain that lies beyond the brain's bandwidth. As a result - and in order to ensure we survive - we do not deal with real world. We form a simplified model of the world, called a "filter" in psychology, and we live in and interact with this filter. This filter is colloquially referred to as our belief system. It lets us come to life-saving conclusions based on only partial or suspected information. Its purpose is to spot life-threatening dangers at the cost of an accurate view of the real world. Thus, false positives are acceptable.

Since the world revealed - so far - by science is definitely counterintuitive, this line from Hamlet is definitely the case: "There are more things in heaven and earth, Horatio, Than are dreamt of in your philosophy".



Henk helps out at a Second Saturday museum outreach with his 14" dob. Photo credit: Tom Totton.



Wow.... I may have let this exploding star go to my head.... Photo credit: Owen Duncan

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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!

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MARCH 2025						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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2	3	4 CAMINO REAL MARKETPLACE 7PM	5	6 FQ MOON HOLLISTER ELEMENTARY 4:30PM	7 SBAU MONTHLY MEETING 7PM	8 SBMNH STAR PARTY 7:30-10PM
9 DST BEGINS TODAY	10	11	12 MONROE SCHOOL 5PM	13 FULL MOON HOPE SCHOOL 4:30PM LUNAR ECLIPSE 10PM	14	15
16	17	18	19	20 VERNAL EQUINOX TODAY	21 LQ MOON WESTMONT PUBLIC STAR PARTY 6PM	22 CHUMASH MEADOWS 7PM
23	24	25	26	27	28	29 NEW MOON
30	31					