May 2019

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Setting up at the Alma Rosa Winery. Photo credit: T. Totton

SAD NEWS

We recently lost long-time club member and webmaster Paul Winn to cancer. Also, world-famous balloonist and friend of the AU Julian Nott was killed in an accident.

MAY GENERAL MEETING

Our May speaker will be fellow club member and newsletter editor, Tom Whittemore. Tom will talk about some of the intricacies of crafting and testing telescope mirrors. The title of his talk is "The Science (and Art) of Mirror Making."

OUTREACH SUMMARY

Since the last outreach report, intrepid AU astronomy volunteers Brandy Ackerman, Farshad Barman, Dave Brehl, Tim Crawford, Joe Doyle, John Edkins, Art Harris, Sean Kelly, Ken Kihlstrom, Chris Larson, Pat & Chuck McPartlin, Janet & Martin Meza, Bonnie & Bruce Murdock, Max Neufeldt, Edgar Ocampo, Peggy O'Rork, Celeste & Gustavo Ritterstein, Javier Rivera, Colin Taylor, Cez & Tom Totton, Tom Whittemore, Patricia Forgey & Jerry Wilson and Hailey Zheng showed neat stuff in the sky to 714 people.

MAY OUTREACH EVENTS

Here are the AU events scheduled so far for May. Our big event this month will be International Astronomy Day, on May 11. To get the latest information on schedules, or directions, just contact Chuck at 964-8201 or macpuzl@west.net

The Telescope Workshop meets on most Tuesday evenings (except 2nd Tuesday) at 7:30 PM at the Broder Building at SBMNH. Contact Tim Crawford at terawf3@cox.net for information. Listen to the AU on the radio at KZSB 1290 AM at 9 AM on the second and fourth Monday of each month.

WEDNESDAY, MAY 1, SETUP 4:30 PM

Solar telescopes for a Science Night at Franklin School, at 1111 East Mason Street in Santa Barbara. We set up on their playground, with entry from Yanonali Street on the west.

THURSDAY, MAY 2, SETUP 4 PM

Telescopes for a Science Night at Montessori Center School, at 401 N Fairview Ave # 1 in Goleta, in the back of the complex across from the Library.

FRIDAY, MAY 3, 7 PM

Monthly meeting in Farrand Hall at SBMNH. Start with a quick planetarium show, followed by a talk from Tom Whittemore on Mirror Making.

THURSDAY, MAY 9, SETUP 4 PM

Telescopes for a Science Night at Roosevelt School, 1990 Laguna Street in Santa Barbara.

SATURDAY, MAY 11, SETUP 9 AM TO 4 PM

Astronomy Day events at Camino Real Marketplace in Goleta. We set up in the central plaza by the theater. Solar scopes and astronomy exhibits and giveaways.

SATURDAY, MAY 11, 6 PM

AU planning meeting in the classroom next to Javier's office at SBMNH, next to Farrand Hall. All are welcome to help plan the club's activities for the year.

SATURDAY, MAY 11, 8 PM

Astronomy Day Star Party at SBMNH, next to the Palmer Observatory.

TUESDAY, MAY 14, SETUP 7 PM

Telescope Tuesday at the Camino Real Marketplace in Goleta. We set up in the central plaza by the theater

THURSDAY, MAY 16, SETUP 4:30 PM

Solar telescopes for a Science Night at Isla Vista School, at 6875 El Colegio Road. We set up on the playground, with access through the SW gate off of W Campus Point Lane.

FRIDAY, MAY 17, SETUP 7:30 PM

Telescopes for the monthly Public Telescope Night at Westmont College, at their observatory next to the baseball field.

FRIDAY, MAY 24, SETUP 7 PM

Telescopes for the Ritz-Carlton Bacara. We set up on the bluff lawn next to the Angel Oak restaurant.

SATURDAY, MAY 25, SETUP 8 PM

Slide show and telescopes for campers at Cachuma Lake Campground. We set up on the grassy field at Dakota Plains.

WEDNESDAY, MAY 29, SETUP 8 PM

Telescopes for first graders from Peabody School camping out at El Capitan Canyon Resort. Let Chuck know if you're planning to come, as the resort security people need a list.

A Gentleman's Club of Eggheads? Ronnie Heron

I recently ran into yet another "perfect" candidate for membership in Santa Barbara Astronomical Unit. Like many, if not most, American adults -- not sure about other countries -- this fellow was fascinated by the continuing parade of awesome discoveries & new theories that permeate the science manuals and daily news. But he had trouble "wrapping his mind around" strange notions like dark matter, Goldilocks zones, tidally locked, exoplanets, and Higgs Bosons. (Hey, join the club -literally!) Therefore, he reiterated what I hear a lot: "Aw, I couldn't relate to or compete with you retired researchers & former science teachers! -- You kiddin' me?" It's the reason, I understand, that many of Santa Barbara's "common folk" or "lay people" do not even come to S.B.AU meetings -- let alone join the club! They honestly believe that we are an intensely closed after-hours society of scientific EGGHEADS: hardcore, cutting-edge thinkers and professional astrophysicists who "talk shop" to each other using math formulas, unpronounceable names

& the latest strange space concepts. Wel-l-l-l, I'm here to say, Gang, "Nuttin' could be further from the truth!" Sure -- we are lucky to have some incredible Astro Unit movers-'n-shakers at our club's core: Pres. Jerry Wilson, an ex-S.B. research technician in the 70's & 80's; current Westmont physics instructor Tom Whittemore, who edits our newsletter; two real-life SB City College astronomy professors, Sean Kelly & Erin O'Connor; a handful of retired physicists and educational pros; plus, of course, the tireless, intensely committed former software engineer - turned - world's best outreach coordinator Chuck McPartlin. . whom some consider the real "hub-&-heart" of our club!

The rest of us? Well, like the electro-magnetic spectrum, it's a "range": from city public servants to lifelong businessmen, from military vets to (heavens!) rock deejays-turned-radio anchors? Retired teachers, former truck drivers, ex-clerks & salesmen, artists, singles and married couples, science groupies & even astrologers. S.B.AU has 'em all! Many of us (myself included) don't even own a telescope. The ones I call "the Brain Trust" -who appear on our twice-a-month AM-1290 morning radio program (2nd & 4th Mondays, 9 - 10 am) -- might be considered "teachers"-in-residence for the majority of the rest of us. Others will ask questions, try to understand these incessant breaking science stories, grasp it -- if possible -- & slowly catch up or simply stay in the dark.... But not afraid to hang around and "break bread" with the few who may GET IT.

My point: It's an "Every-Man's Society!" Santa Barbara Astronomical Unit is not -- I repeat, NOT -a "snobbish" underground fraternity of scientific illuminati, totally out of reach for the local little guy. Our membership runs the gamut of all walks of life, a wide variety of professions (retired or still working), a cornucopia of religions/ethnicities / trades. So to the members reading this -- your ASSIGNMENT: Spread that word, okay? Try to finally bring to an upcoming 1st-Fri.-of-the-Month general meeting that basic borderline buddy or doubting-Thomas wife who doesn't feel he or she would fit in. Young people? Grown children, grandkids, a student you might know?-- they're especially welcome, since they could be our club's FUTURE ... (we ain't getting any younger) I promise we will meet & greet your guests, try to make them feel comfortable and -- if they can make

it through the science speech (& stay enthused) -feed the newcomers very well, with one of the best
table-spreads of refreshments any club in town can
offer!



"That's right! This is <u>exactly</u> what I saw naked-eye!" Photo credit: T. Totton.

From the President Jerry Wilson

What happened before the Big Bang or what was there before time began? I came onto this topic in an undergraduate physics class. It's natural to ask the question, but in 60s there was not a lot published on the topic. So, our professor fell back on claiming the question is an oxymoron. There couldn't be any time before time began. It's like asking what's south of the South Pole. A good point but, not at all satisfying. Since then there's been at least a half-century of model development and discussion, not to mention speculation. In addition to the above argument, some have claimed that at the Big Bang, time as a dimension unrolled in both directions. We are in the universe with one arrow of time, and there is another universe with time going the other way. Kind of a conservation of momentum. Before you start thinking that this is from the people that brought you the spherical cow, it's not crazy, it's just hard to imagine. Universes may propagate other universes. Each black hole in our universe may be a Big Bang in its own right, spawning a new universe we can never hear from. Or our universe may be on a cycle of inflation and then deflation back to a "gnaB giB", only to re-bang on an endless cycle.

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Single = \$20 Family = \$25

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The Astronomical Unit

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May 2019						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			FRANKLIN SCHOOL 4:30PM	2 Montessori School 4PM	GENERAL MEETING 7PM	4
5	6	7	8	9 ROOSEVELT SCHOOL 4PM	10	ASTRONOMY DAY 9AM-4PM PLANNING MEETING 6PM STAR PARTY 8PM
12	13 TECH TALK KZSB (AM 1290) 9-10 AM	14 Camino Real Marketplace 7PM	15	ISLA VISTA SCHOOL 4:30PM	WESTMONT COLLEGE 7:30PM	18
19	20	21	22	23	24 RITZ-CARLTON BACARA 7PM	25 CACHUMA LAKE CAMPGROUND 8PM
26	27 TECH TALK KZSB (AM 1290) 9-10 AM	28	EL CAPITAN RESORT FOR PEABODY SCHOOL 8PM	30	31	