



AU AstroNews

The Newsletter of the Astronomical Unit

March 2007

Sponsored by the Santa Barbara Museum of Natural History

OUTREACH SUMMARY

Over the last month or so, AU outreach volunteers Andy Allen, Warren Bitters, John Gomm, Art Harris, Jürgen Hilmer, Dale Lowdermilk, Edgar Ocampo, Barb O'Grady, and Pat & Chuck McPartlin brought astronomy to **282** customers.

MARCH EVENTS

Here are the AU events scheduled for March. Lots of school Science Nights! To get the latest information on schedules, or directions, just contact Chuck at 964-8201 or macpuzl@west.net.

THURSDAY, MARCH 1, SETUP 5:30 PM

Telescopes for "Reading Under the Stars" night at Hollister Elementary School.

FRIDAY, MARCH 2, 7 PM

Start with a quick planetarium show by Krissie, then listen as Dr. Joann Eisberg tells us about New Zealand astronomer Beatrice Tinsley, and her contributions to the study of Cosmology.

THURSDAY, MARCH 8, SETUP 5:30 PM

Telescopes for Science Night at Hope Elementary School.

SATURDAY, MARCH 10, 5 PM

AU planning meeting in the classroom next to Krissie's office. Anyone is welcome to attend and help plan your club's activities.

SATURDAY, MARCH 10, 7 PM

Monthly Public Star Party, next to Palmer Observatory at SBMNH. Saturn will be the "big star."

SUNDAY, MARCH 11, 2 AM

Surprise! Daylight Saving Time comes early this year.

TUESDAY, MARCH 13, 5:30 PM

Telescopes for Laguna Blanca Elementary School Science Night. It will be at the San Ysidro Road Lower Campus.

THURSDAY, MARCH 15, 5:30 PM

Telescopes for Monte Vista Elementary School Science Night.

FRIDAY, MARCH 16, 7 PM

Monthly Public Telescope Night at Westmont College, just outside Carroll Observatory.

SATURDAY, MARCH 17, ALL NIGHT

Annual AU Messier Marathon at the Gun Club. Extreme astronomy at its best!

THURSDAY, MARCH 22, SETUP 6 PM

Telescopes for Science Night at Brandon Elementary School.

FRIDAY, MARCH 23, SETUP 6 PM

Telescopes for Santa Barbara Christian School, behind the Lutheran Church at 3723 Modoc Road.

NEW DIRECTORY

"Alert! A new Santa Barbara Astronomical Unit Members' Directory will be printed soon! It will contain the names, addresses, telephone numbers, and email addresses of AU members. It will only be given to AU members. If you do **NOT** want to be listed in the directory, please notify Andy Allen, AU Secretary, as soon as possible! His email address is andrewstuartallen@gmail.com, or you can phone him at (805) 451-6981."

GRIFFITH OBSERVATORY TRIP

If you liked our trip to JPL last year, you're going to *love* our trip to the newly remodeled Griffith Observatory this year! That's right, pack up your phasers and tricorders, because the Astronomical Unit will be transporting 40 lucky people to this fantastic place on Star Date 05/09/2007. Our means of transportation will be Air Bus and it will undock from the SBAU Command Center (SBMNH Parking Lot) at 9:30AM and ETA is 11:30AM, providing we stay at warp speed all the way. The cost is but a mere \$33.00, which will pay for the bus and shuttle craft ride up to the Observatory (seniors and kids 5 to 12 can take off \$4.00, children 4 and under can take off \$8.00). For those of you who want to catch a 50 minute Planetarium show, you'll need to purchase a ticket once you get there as they are not sold in advance (\$7.00). The show is not appropriate for children under 5 years of age. No food is allowed to be carried on to the Griffith Observatory Grounds - but there is a Café on site. So, don't get the Vulcan fever and hesitate in buying your spot because these tickets will be hotter than Photon Torpedoes. Please email your request for a boarding pass to rubenalvag@aol.com and make sure you include your full name and contact information so an AU Starfleet Officer can get in touch with you as the deadline will be the April meeting!

WHAT'S UP WITH THE PLANETS?



Venus continues its climb in the southwest during March, setting more than three hours after the Sun by month's end. The planet is bright enough to spot

without optical aid well before the Sun goes down. See if you can find it! Telescopes will show the planet small and more than 80 percent illuminated during the month. After having reached opposition in February, *Saturn* rides high in the east-southeast at dusk. It dims only slightly from its peak magnitude of 0.0 last month, but telescopes will show the rings a little more open than they were in February. Pay careful attention to this gas giant as it creeps further west from Regulus, increasing its distance from the Lion's heart from 9.5° to 11.5° . *Jupiter* starts rising as early as midnight. It reaches west quadrature on March 3. Since this alignment causes Jupiter's shadow to be cast west, this is the best orientation to view eclipses of the Galilean satellites. The best time for telescopic observations is at dawn when Jupiter is highest in the sky. Keep in mind, however, that observations will be somewhat compromised by Earth's atmosphere since Jupiter is passing through the low-lying constellation of Scorpius as the year goes on and does not get very high in the sky. *Mars* still refuses to rise much more than an hour and a half before the Sun. During the month of February, the god of war has been slowly moving through Sagittarius and is still not very prominent in the east-southeast at dawn. Watch for *Mercury* in the early morning sky as it reaches greatest elongation of 28° on the 22nd. Although this is the farthest Mercury ever gets from the Sun, this particular apparition is not a particularly favorable one since the ecliptic at this time of year makes a very shallow angle with the horizon.

ASK DOCTOR OCULAR!

(Doctor Ocular answers your tough outreach questions!)

It's happened to all of us. You're at an AU outreach event, or you've just mentioned your interest in astronomy, and that dreaded but inevitable question comes: "**Can you see the flag on the Moon with your telescope?**" Of course, you can respond with the simple answer, "No"; but perhaps you'd like to make your questioner suffer a little longer in retaliation. With perfect optics, just what sort of aperture would you need to resolve a hypothetical one meter square (to be generous) flag, assuming one laid flat on the lunar surface? Place it on the proper side of the Moon, and in sunlight, and free of dust, just to make things easier. First of all, get rid

of the Earth's atmosphere. It just wiggles everything around to the point that the whole attempt would be hopeless. Now you must add the assumption that your respirator mask uses optical quality glass in its eye holes. If you're afraid you'll scare your tormentor away by mentioning math, now would be a good time to close the door or back him or her into a corner. Mumble something about Dawes Limit, or the smallest angle (in arcseconds) resolvable by a telescope, at 4.56 divided by its aperture (in inches). Casually mention that there are about 1,800 arcseconds across the face of a Full Moon. Wave your hands hypnotically as you state in a calm voice that the Full Moon is about 3,475,000 meters across, and dividing 1,800 arcseconds by 3,475,000 meters gives you the number of arcseconds subtended by your flag. Be generous, and round the result up to 0.000518, given that we're waving our hands. OK, now all you have to do is divide 4.56 by 0.000518, and that's the aperture of your Big Moon Flag Telescope in inches. That's only 8,803 inches, a mere 1,100 times bigger than your garden-variety C8. It shouldn't take too long to grind and polish a glass blank merely 734 feet in diameter, to account for the probable turned edge - just ask Tom Whittemore to figure it and Tim Crawford to test it for you. If for some reason your victim wants to see a more serious discussion of the answer, you can always send him to: <http://calgary.rasc.ca/moonscope.htm>

FOR SALE

Celestron Nexstar 80 GOTO mount (no optical tube assembly) with tripod. 90mm diameter clamshell, fits most small refractors. \$100.00

Orion Lanthanum 3.8mm eyepiece. NIB. \$95.00

Interested? Please call or e-mail Tony Galvan:
(805) 685-5387; galvan@dosgatos.com.

AU Information Box

President:	Tim Wittenburg	969-6945
	black10@aol.com	
Vice President:	Laurence Harms	962-9855
	lauroh@aol.com	
Secretary:	Bridget & Andy Allen	
		451-6981
	andrewstuartallen@gmail.com	
Treasurer:	Ruben Gutierrez	682-0405
	rubenalvag@aol.com	
Outreach:	Chuck McPartlin	964-8201
	macpuzl@west.net	
Webmaster:	Paul Winn	685-5646
	strg8zn@cox.net	
Refreshments:	Nancy Buck	969-0070
	NMTBuck@aol.com	
Newsletter:	Tom Whittemore	687-2025
	kometes@aol.com	

AU Astronomy Information Pager

(Leave a short message) 564-9002

SBMNH Astronomy Program Coordinator

Krissie Cook 682-4711x173
kcook@sbnature2.org

SBMNH Astronomy Program Tape

Updated monthly 682-4711x405

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 = \$15 **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>

March 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Hollister Elementary 5:30 PM	2 Monthly Meeting 7 PM	3
4	5	6	7	8 Hope Elementary 5:30 PM	9	10 Planning Meeting 5 PM SBMNH Star Party 7 PM
11 Daylight Savings Time!	12 	13 Laguna Blanca 5:30 PM	14	15 Monte Vists Elementary 5:30 PM	16 Westmont 7 PM	17 Messier Marathon at the Gun Club!
18	19 	20	21	22 Brandon Elementary 6 PM	23 SB Christian 6 PM	24
25 	26	27	28	29	30	31

The Astronomical Unit

c/o Santa Barbara Museum of Natural History
2559 Puesta Del Sol Road
Santa Barbara, CA 93105-2998