



AU AstroNews

The Newsletter of the Astronomical Unit

December 2004

Sponsored by the Santa Barbara Museum of Natural History

November's Speaker

Our thanks to Wally Pacholka, who gave us a visually delightful presentation on his award-winning astrophotography techniques. Only two nights later, AU member Craig Prater made good use of Wally's information to capture some great photos of an aurora that was visible from Santa Barbara and Goleta, one of which appeared in the News-Press.

Election Night

December is election time. Yes, we're all sick and tired of elections. Come cast your vote for red emission nebulae or blue reflection nebulae. Or, better yet, step forward for a position and help guide your club through 2005.

Members' Night Presentations

After the elections, we'll have a series of short presentations by AU members. Signed up so far are Tim Wittenburg – "Lunar Pictures", Tony Galván – "Transit of Venus from Italy", Mary Freericks – "Space Poems", Bill Buzin – "Some Things", Jim Billig – "UFOs", and Tim Crawford – "The Mirror-Making Class and Outreach Thoughts".

Astronomy Calendars

Once again, in answer to the dire need for gifts at this time of year, the AU has a batch of Astronomy Calendars for sale at \$12 each. They feature a beautiful photograph and list of astronomical events for each month. We only got one box, so get one while you can!

November Outreach Volunteers

Since the last newsletter, volunteers Bridget & Andy Allen, John Boyd, Joe Brown, Bill Clausen, Tim Crawford, Joe Doyle, Art Harris, June Kelley, Pat & Chuck McPartlin, Edgar Ocampo, Ron Pembleton, Kathy & Ken Pfeiffer, Craig & Kenyon Prater, John West, Tom Whittemore, and Tim Wittenburg went out under cold starry (and sometimes cloudy) skies to show cool stuff to **778** visitors.

Speaking of Outreach

If you've helped out at some outreach events during the year, there's still time to cinch your **Frequent Outreach Award**, consisting of free AU membership for a year for volunteers at 6 or more events by the time of the holiday party!

AU Events for December

Here's the calendar of AU events scheduled so far for December. We're hitting lots of schools, and we can always use telescopes and constellation tour guides. Remember that events are subject to change, and new events pop up, so contact Chuck at 964-8201 or macpuzl@west.net for the latest information.

Friday, December 3, 7:30 PM - Monthly meeting: Elections and Members' Night. There will be no planetarium show before the meeting, because Krissie is away.

Thursday, December 9, setup 6 PM - Telescopes for Hollister School.

Saturday, December 11, all day - Planetarium shows at the Museum all day to say goodbye to Alice, the planetarium projector, which is being replaced.

Saturday, December 11, 5 - 6 PM - AU Planning Meeting at Krissie's office at SBMNH. All members are welcome.

Saturday, December 11, 7 - 10 PM - Monthly Public Star Party at SBMNH. See the Pleiades, the Andromeda Galaxy, and later Comet Machholz and Saturn.

Saturday, December 11, all night - Dark Sky. Contact Joe Doyle (jdoyle@mrl.ucsb.edu) or Paul Winn (strg8zn@cox.net) to find out when and where.

Sunday, December 12 - Look up tonight, and you may see some Geminid Meteors. The predicted peak is tomorrow at 2 PM, but it's a wide shower.

Monday, December 13, 7 PM (tentative) - Telescopes for the Outdoor School at the Rancho Alegre Boy Scout facility near Cachuma Lake. Contact Chuck for details. Also a chance for some Geminid Meteors.

Wednesday, December 15, 6 PM - Annual AU Holiday Party at the Beachside in Goleta. **Remember, the last day to pay is Friday, 12/03/04.** See the article below for more details.

Thursday, December 16, setup 7:30 PM - Slide show (7 PM) and telescopes (8 PM) for Santa Barbara Junior High School, in and behind the new Marjorie Luke Theater on the campus. Enter through Ortega Street, and the scope area is to the East of where we usually set up by the cafeteria.

Friday, December 17, 7 PM - Monthly public telescope night at Westmont's Van Kampen Observatory.

Wednesday, December 29, setup 6:30 PM - Slide show and telescopes for Ojai Elderhostel.

Coming Up In January

We don't have a speaker set up at press time, but we're trying to get Dr. Hutterer, the Museum's Director, to speak to us about the Museum's future plans. And, on January 6 to 8, look for Comet Machholz near the Pleiades. Now **that's** a photo-op!

AU Annual Holiday Party

Once again, the AU will be gathering at the Beachside (at Goleta Beach) to celebrate the holidays. This year, the event will be held on Wednesday, December 15, starting at 6 PM. **The last night to sign up and/or pay is at the December meeting!** Before then you can contact Pat or Chuck McPartlin at 964-8201. The price is \$32 per person, which covers dinner, tax, and tip. Once again, you will have a choice of the Pavo (chicken), Pisces (salmon), or Taurus (beef) entree.

Goodbye Alice

Saturday, December 11 is the Museum's all-day celebration of Alice, the star projector. There will be

fun activities for families, and of course lots of planetarium shows. Krissie has developed a show with all the "newest" astronomical information from 1957, when the planetarium first opened, called "Blast From the Past". The planetarium show lineup will be: 11:00 - Twinkle, Twinkle for Little Stars, 11:30 - Twinkle, Twinkle for Little Stars (encore), 12:00 - Over the Moon, 1:00 - Blast From the Past, 2:00 - Over the Moon, 3:00 - Ring World, 4:00 - Blast From the Past.

New Bright Comet

In late August, Don Machholz, cruising the sky with his 6-inch Newtonian at 35x from Colfax, California, discovered his 10th comet. **C/2004 Q2 Machholz** was already obvious (though without much tail) in the 4-inch finderscope at Westmont in mid-November. It will rise in the southeast before 8 PM by early December, and will spend the month cruising up from below the feet of Orion and brightening. Between January 6 and January 8, it will sneak past the Pleiades, and may be at naked-eye brightness. It's well worth going out to take a look at in binoculars or through a telescope. Here's a chart for its position at 8 PM PST each night, starting with the labeled position on December 1, with dots at one week intervals along the orbital path.

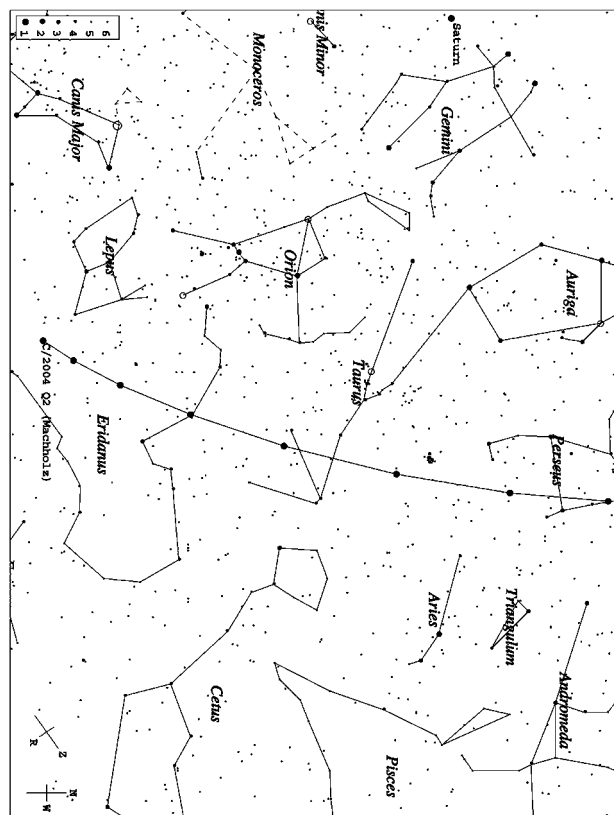


Chart from XEphem for Mac OS X

Really Big Telescopes

OK, they're not as big as the Keck Telescope, but lately the AU has been given, or asked to find a good home for, some really large telescopes. We currently have an optically excellent 12.5-inch Cave Newtonian on an Astrola mount, plus the huge 16-inch Newtonian from Palmer Observatory at the Museum and its yoke mount. On top of that, Westmont College is looking to eventually give the 16.5-inch Carroll Scope and mounting, which we have been using for years at public observations there, to a local high school or other educational institution that will put it to good use. The Carroll Scope is convertible from a Newtonian configuration to a longer focal length classical Cassegrain for planetary work. If you know of anyone who would appreciate such a Big Dog, and give it some exercise under the stars, contact the AU! These scopes have had all their shots and show no signs of hip dysplasia, but may have worm gears.

Breakthrough Discovery at KITP

All those theoretical physicists at the Kavli Institute of Theoretical Physics at UCSB, between winning Nobel Prizes, have finally answered the age-old question of why the sky is blue. The final proof takes up 128 pages, but here's the executive summary, as posted on the web by Joachim Verhagen at <http://www.xs4all.nl/%7Ejcdverha/scijokes/index.html#2>

WHY THE SKY IS BLUE

by John Ciardi

I don't suppose you happen to know
Why the sky is blue? It's because the snow
Takes out the white. That leaves it clean
For the trees and grass to take out the
green.

Then pears and bananas start to mellow,
And bit by bit they take out the yellow.
The sunsets, of course, take out the red
And pour it into the ocean bed
Or behind the mountains in the west.
You take all that out and the rest
Couldn't be anything else but blue.
Look for yourself. You can see it's true.

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Single \$15 Family \$25

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
December 2004			1	2	3 AU Meeting and Last day to pay for Holiday Banquet!	4 
			5	6	7	8
12	13 Outdoor School <div style="border: 1px solid black; padding: 2px; display: inline-block;">Geminids</div>	14	15 <div style="border: 1px solid black; padding: 2px; display: inline-block;">AU Holiday Banquet</div>	16 SB Junior High School	17 Westmont Public Obs	18 
19	20	21 <i>Winter Solstice</i>	22	23	24	25 <i>Christmas Day</i>
26 	27	28	29 Ojai Elderhostel	30	31 <i>New Year's Eve</i>	

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