



# AU AstroNews

## The Newsletter of the Astronomical Unit

November 2007

Sponsored by the Santa Barbara Museum of Natural History

### Outreach Totals

October outreach events picked up a little, but our event with the biggest potential attendance, Canalino School, was clouded out. We'll try again this month. As it was, we showed the sky to **433** people. Our volunteers were Andy Allen, Chad Caprio, Bill Clausen, Jason & Tim Crawford, Mike Farris, John Gomm, Ruben Gutierrez, Art Harris, Jürgen Hilmer, Chris Larson, Pat & Chuck McPartlin, Edgar Ocampo, Helen Osenga, Nancy Rohrer, Tom Whittemore, and Jim Williams.

### November AU Outreach

Here are the AU events scheduled so far for November. To get the latest information on schedules, or directions, just contact Chuck at 964-8201 or <mailto:macpuzl@west.net>

### Friday, November 2, 7:30 PM

AU monthly meeting in Farrand Hall at SBMNH. AU member Joe Doyle will show us how to build a Dobsonian telescope, assembling one during his talk.

### Sunday, November 4, 2 AM

Daylight Saving time ends. Fall back an hour.

### Thursday, November 8, setup 6 PM

Slide show and telescopes for Cleveland Elementary School in Santa Barbara.

### Saturday, November 10, 5:30 PM

AU Planning Meeting in the classroom outside Krissie's office at SBMNH. Come help plan your club's activities.

### Saturday, November 10, 7:30 PM

Monthly Public Star Party at SBMNH. Bring a scope and have fun, showing goodies in the sky outside Palmer Observatory.

### Thursday, November 15, setup 6:30 PM

Slide show and telescopes for La Colina Junior High School in Santa Barbara.

### Friday, November 16, 7:30 PM

Monthly Public Telescope Night at Westmont College, at the Carroll Observatory, next to Van Kampen Dormitory.

### Saturday, November 17, setup 6:30 PM

Telescopes for a group of students at the Sedgwick Nature Reserve, in the foothills near Los Olivos, at the end of Brinkerhoff Avenue. Catch some Leonid meteors?

### Monday, November 19, setup 6:30 PM

Telescopes for Canalino Elementary School, in Carpinteria off Linden Avenue.

### Thursday, November 29, 5:30 PM

Telescopes for Science Night at La Patera Elementary School in Goleta.



*Chad Caprio works on his 12.5" mirror in the Wednesday evening workshop. Photo courtesy of T. Whittemore.*

## An Invitation

By Tim Crawford

Greetings everyone,

I just want to touch base with you regarding the mirror-making class Tom Whittemore and I run every Wednesday evening from 7:30 to 9:00 PM in the Broder Building at the Santa Barbara Museum of Natural History. This workshop has been running continuously for three years, and lately, a few more mirror-makers have joined our trusty workshop. Maybe this is because we have had the good fortune of showing and telling those who come to our workshop the process of making a fine mirror. It is certainly much easier to buy a mirror, but, believe me, there is nothing like experiencing making your own optics! Although it is not as simple as it sounds, crafting a mirror by hand is an elegant and straightforward process that only requires patience, imagination and good science. For the curious, we recommend you come by and see us anytime. Last week we had a lady drop by who attended the last star party and asked me about our mirror-making techniques. I told her she could not have come at a more perfect time. At this particular workshop we had one person who was in the beginning stages of grinding a mirror, another person in the middle of the process, and still another in the final stage of polishing. While this was going on, Tom Whittemore and Chuck McPartlin poured a pitch lap for Chuck's 10" unfinished mirror using for the first time a pitch lap mold Chad Caprio has donated to the workshop. Thanks again, Chad! Luckily, I brought to the workshop a tester that I built a couple years ago when I was finishing my 10" mirror. With this tester we can diagnose imperfections on the surface of a mirror to fractions of a wavelength of light. I told our visitor, "Watch this!" Then I set the mirror on the test stand and examined it with what is traditionally our first bench test, the Ronchi test. We use this test in the early polishing stages of a mirror to determine how consistently we have figured the desired sphere onto the surface of a mirror. After I turned on the light source and positioned the mirror at the correct distance from the source, guess what I saw? An image of perfectly vertical lines from the Ronchi grating! This told me that all my efforts over the last several months resulted in a wonderful spherical surface! After a round of "high fives," we looked forward to meeting again next week. So, if

this workshop sounds interesting to you, please come by and join us. I promise you will not be disappointed.



*In a moment of absolute serenity Mike Farris works on his 8" mirror. Photo courtesy of T. Whittemore.*

## AU Annual Banquet

The Astronomical Unit cordially invites you and your spouse or guest to the Annual AU Holiday Party at The Beachside Bar Café **5905 Sandspit Road, Goleta, CA 93117** on Thursday, December 13, 2007 6:00pm Gather, No-Host Bar Available 6:30pm Dinner & Awards Presentations 7:30pm Gift Exchange-\$10 Maximum (in good taste, please) Entrée Choices:

- \***California Chicken:** Marinated in Fresh Herbs, Charbroiled and Served with Fresh Avocado and Cilantro Sauce
- \***Salmon Hollandaise:** Charbroiled & Served on a Bed of Sautéed Spinach Topped with Herb and Dijon Hollandaise Sauce
- \***Filet of Beef:** Charbroiled and Topped with Pearl Onion and Shiitake Mushroom Demiglaze
- \***Portobello and Penne:** Grilled and Served with Sautéed Vegetables atop Penne Pasta in Chèvre Sauce

**All Entrées Served With** Your choice of Caesar Salad or New England Clam Chowder, Sautéed Vegetables and Garlic Parmesan Whipped Potatoes

Hot Coffee and Tea

(Dessert is Available for an Additional Charge)

\*(It is requested you pay items from the bar in cash- numerous credit cards are problematic)

Cost of Dinner is \$40.00 per person (which includes tax of 7.75% and gratuity of 18%)

Payment due no later than Tuesday, November 27, 2007

If paying by check, please make your check payable to "The Astronomical Unit" and either give your payment to any AU Officer on or before 11/27/2006, or mail your check (no cash) to:

The Astronomical Unit  
c/o SBMNH  
2559 Puesta Del Sol Road  
Santa Barbara, CA 93105-2998

### For Sale

Meade 60mm f/5 refractor with extras, \$120. This scope was made in Japan in the 1980s, probably by Vixen, and it's a good-quality achromat. It comes with a very solid tabletop alt-az mount (standard 1/4-20 tripod attachment), 6x30 finder, 25mm and 9mm MA eyepieces, generic mirror diagonal (not original), and a T.O. solar filter of unknown age. It has a metal 1.25" focuser. Scope has a few minor scuffs and nicks in paint, but it looks good and the objective is in excellent condition. Would make a nice travel scope or "super finder." Andy Allen, 8 0 5 - 4 5 1 - 6 9 8 1 o r

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### **AU Information Box**

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### **AU Astronomy Information Pager**

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### **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 20<sup>th</sup> 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>

## November 2007

| Sunday                   | Monday                                  | Tuesday | Wednesday | Thursday   | Friday   | Saturday  |
|--------------------------|---|---------|-----------|--|--|---|
|                          |   |         |           | 1<br> | 2<br>AU Meeting<br>7:30PM  | 3   |
| 4<br>DST ends<br>at 2 AM | 5                                       | 6       | 7         | 8<br>Cleveland<br>Elementary<br>6PM  | 9<br> | 10<br>Planning<br>Meeting 5:30PM<br>SBMNH Star<br>Party 7:30PM                            |
| 11                       | 12                                      | 13      | 14        | 15<br>La Colina<br>Junior High<br>6:30 PM  | 16<br>Westmont<br>College<br>7:30 PM   | 17<br> |
| 18                       | 19<br>Canalino<br>Elementary<br>6:30 PM | 20      | 21        | 22   | 23   | 24<br> |
| 25                       | 26                                      | 27      | 28        | 29<br>La Patera<br>Elementary<br>5:30 PM   | 30   |   |

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