



# AU AstroNews

## The Newsletter of the Astronomical Unit

November 2002

Sponsored by the Santa Barbara Museum of Natural History

### Thanks Eric

Many thanks to Eric Kopit from Orion Telescope & Binoculars for his talk last month on choosing a telescope and observing accessories.

### November's Meeting

The speaker for this month's meeting will be Dr. Peter Mason of JPL/Cal Tech. His specialty is low-temperature physics, and he worked on the BOOMERANG project in Antarctica measuring anisotropies in the cosmic microwave background radiation. Dr. Mason is also the father of our favorite Park Naturalist – Liz Mason of Cachuma Lake!

### AU Campout 2002

The AU campout at Cachuma Lake generated the worst weather of the month, with rain, wind, and clouds the whole weekend. It's becoming a tradition! The Nature Cruise was a great success, with Liz Mason conjuring up just about the entire range of fauna as though they were choreographed, including a finale with a Bald Eagle. The potluck drew about 40 attendees, and the recipe for this year appears later in the newsletter.



Joe Doyle, Paul Winn, and Pat McPartlin try to stay warm at the campout.

### October Outreach Volunteers

Since the last newsletter, volunteers Art Harris, Pat McPartlin, Edgar Ocampo, Helen Osenga, and Jim Williams shared the night sky with **321** customers at AU events.

### AU Events for November

Friday, November 1, 7:30 PM – Monthly meeting in Farrand Hall at SBMNH.

Saturday, November 2, all night – Dark Sky observing. Contact Paul Winn (strg8zn@cox.net) to find out where and when.

Monday, November 4, 7 PM – Slide show and telescopes for La Colina Junior High School.

Saturday, November 9, 4 PM – Planning Meeting in the classroom outside Dave Totzke's office at SBMNH.

Saturday, November 9, 6 PM – Monthly Public Star Party at SBMNH. **Note the earlier start!**

Thursday, November 14, 7:30 PM – Set up telescopes at SBMNH for the archaeoastronomy lecture by Dr. Aveni on Maya Science and Venus.

Friday, November 15, 7 PM – Monthly Public Observation at Westmont College's Van Kampen Observatory.

Tuesday, November 19, 2 AM – Peak of the **Leonid Meteor Shower**. Gather at the Gun Club. At sunset Tuesday, the Moon rises in a penumbral eclipse.

Remember that outreach events often change at the last minute. Contact Edgar or Chuck for the latest developments.

### Holiday Party

The AU's annual **Holiday Banquet** will be held again this year at the Beachside Bar & Grill at Goleta Beach, on Thursday, December 19. Arrive at 6:30 PM to socialize, and we'll start eating at 7. Thanks to Bob Michael for doing all the work setting us up.

As of press time, it looks like the menu and prices will be the same as they were last year. A \$25 fixed price gets you dinner, tea or coffee, tax, and tip.

Dessert is optional, with an extra \$4 charge. Alcoholic beverages are optional at extra charge (no host bar).

The entrée selections are: Roast Prime Rib of Beef (the Taurus Plate), Salmon Hollandaise (the Pisces Plate), and Pecan Crusted Chicken (the Pavo Plate). Included with each entrée are fresh vegetable, garlic parmesan whipped potatoes, sourdough rolls, and clam chowder or Caesar salad.

Seating is limited, so sign up now. We need a final count and entrée preference, so come to the meeting or call Bob Michael at 963-5614 and tell him who's coming and what they want to eat!

### **Cookie Recipe**

Speaking of food, this year's favorite campout recipe is courtesy of Sharon Harris:

#### **Globular Clusters**

(Coconut Cranberry Chews, Sunset Magazine 12-01)

- 1 1/2 cups butter, softened
- 2 cups sugar
- 1 tablespoon grated orange peel
- 2 teaspoons vanilla
- 3 1/4 cups flour
- 1 teaspoon baking powder
- 1/4 teaspoon salt
- 1 teaspoon baking powder
- 1 1/2 cups dried cranberries
- 1 1/2 cup sweetened dried flaked coconut

In large bowl, with mixer on medium speed, beat butter, orange peel, sugar, and vanilla until smooth. Mix flour, dry ingredients (again, I like to sift them together). Add to butter mix by thirds. Beat on low speed 5 minutes. Add cranberries and coconut. Shape into 1" balls and place on ungreased cookie sheet. Bake at 350° F in regular or convection oven until edges begin to brown, 8-11 minutes. If using two cookie sheets, switch positions halfway. Cool on sheets 5 minutes. Cool completely on racks. Makes about 6 dozen.

### **Archaeoastronomy Lecture**

Thursday, November 14, at 7:30 PM in Fleischmann Auditorium, Dr. Anthony Aveni will speak on **Maya Science: Astronomy or Astrology? - Mathematics or Numerology?**

The Mayan civilization that flourished in Mesoamerica was one of the greatest in the Western

Hemisphere. Even though Mayan archaeological and artistic remains were first seriously studied about a century ago, only recently have we begun to appreciate that these ancient rulers of Central America were obsessed by the study of time, calendar and astronomy.

Archaeoastronomer Anthony Aveni discusses how written texts, monumental inscriptions and building orientations suggest that Maya astronomers carefully watched the skies. Learn how central to Mayan culture was the belief that the movements of celestial bodies - chief among them Venus - reflected the intentions of spiritual forces that ruled the world. Discover how the Maya understanding of the natural world is distinctive because of the manifold ways in which it fuses the domain of western science with the realm of mysticism. Aveni is author of *Sky Watchers of Ancient America*, and editor and contributor of *Archaeoastronomy in Pre-Columbian America*, *Native American Astronomy*, and contributor to *In Search of Ancient Astronomies*.

Advance tickets are on sale in the Museum Admissions Office. Members and students with ID \$6; non-members \$8.

### **November is Harry Potter Time**

Ever since you saw it in the opening scene of *Harry Potter and the Sorcerer's Stone*, you knew you **HAD** to have one. The amazing Put-Outer is every astronomer's dream accessory. Simply point it at your neighbor's offending porch light, or at the street light next to Gail Massey's back yard, and click. The light goes out, just like magic!\*

Now, thanks to an exclusive licensing agreement with Hogwarts Ltd., Ocular Industries is able to bring you this must have device.

From now on, your back yard can be as dark as the inside of a dragon's belly! No more long drives to Mt. Pinos! Rush your owl with 9 galleons, 16 sickles to Ocular Industries! Supplies are limited.

(\*When used by muggles, results may vary.)

### **Dream Trip!!**

The Astronomical Society of the Pacific is auctioning off a 5-day trip to Hawaii for two which includes a night in the Keck control room with Dr. Geoff Marcy during one of his regularly scheduled planet hunting observing runs. Full details about the upcoming auction are available at <http://www.astrosociety.org>.



## From Brobdingnag to Lilliput: My Travels Through 30 Years of the Space Program

By Diane K. Fisher

□ In the early 70s, as minor character in the Apollo Program, I worked in the Vehicle Assembly Building at KSC. □ Stepping into the VAB, I felt like the incredible shrinking woman. □ The space inside accommodated six 45-story office towers with vast open spaces to spare. □ In the vertical spaces between the office towers, the 363-foot high Saturn Vs were assembled.

From my third floor office in one tower, I often delivered documents to higher floors in other towers. Between riding the stomach-dropping glass elevators and dashing across to other towers on narrow, open catwalks at the 28th or 44th floor levels, I soon overcame my fear of heights.

On these excursions, I would see the Saturn Vs come together in the 500-foot high bays. After hundreds of engineers and technicians had toiled around the clock for months, the morning of high-bay rollout would arrive. □ Slowly, the Crawler Transporter would bear forth the Mobile Launch Platform and the majestic Saturn V rocket. □ The morning sun reflecting off its gleaming white form would take my breath away.

The last Apollo mission was 30 years ago. □ As the Apollo program ended, some thought human missions to the Moon, Mars, and beyond would continue apace. □ Though they didn't continue, the Apollo program remains a single, large step in our technological evolution as a species. □ It is a great tribute to the intelligence, ingenuity, and dedication of the people responsible for the Apollo missions that they were so successful and the disasters so few. □ NASA's program today continues to build on the technological and managerial legacy bequeathed us by Apollo. □

And just where are we now? □ Among its other tasks, the International Space Station is teaching people to live in space for long periods. □ Robotic space missions are studying issues like land use and global warming and discovering the wonders of the universe, its history, and our place in it. □ With humanity's many other pressing needs, such quests must be done efficiently.

Part of NASA's mission is to develop the technologies to do cost-effectively what has never been done before at all. □ NASA's New Millennium Program develops and validates new technologies for space. □ Missions such as Deep Space 1 and Earth Observing 1 carry and test multiple new technologies (such as ion propulsion and advanced imaging instruments) previously untried in space. □ And, unlike the Saturn V, the ultimate gas-guzzling muscle car of the 70s, the new technologies must be the "zero emission" vehicles of the 21st century-small, efficient, and capable beyond anything done before.

*Diane K. Fisher is the developer and writer for The Space Place web site. This article was provided by the Jet Propulsion Laboratory, California*

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**On the Web:** [www.sbau.org](http://www.sbau.org)

# November 2002

					1 AU Meeting	2 Dark Sky
3	4 ● La Colina Jr HS	5 Election Day	6	7	8	9 AU Planning Meeting SBMNH Star Party
10	11 ⊙ Veteran's Day	12	13	14 SBMNH Archeo-Astronomy Lecture	15 Westmont Public Obs	16
17	18	19 ○ Moonrise - penumbral eclipse Leonids	20	21	22	23
24	25	26	27 ⊙	28 Thanks-giving Day	29	30

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