January 2002

Sponsored by the Santa Barbara Museum of Natural History

# January's Meeting

Our speaker at the January 4 meeting will be Dr. Alex Filippenko, Professor of Astronomy at UC Berkeley. His topic will be "Einstein's Biggest Blunder? The Case for Cosmic 'Antigravity'."

Recent observations of very distant supernovae have provided evidence that the expansion of the Universe is speeding up with time, rather than slowing down as expected. This discovery resurrects the idea of a long-range "antigravity" effect in the Universe – a nonzero Cosmological Constant – first proposed by Albert Einstein and later renounced as his "biggest blunder." This was voted the "Science Breakthrough of 1998" by Science magazine.

Dr. Filippenko received his B.A. in Physics from UC Santa Barbara, and his Ph.D. in Astronomy from the California Institute of Technology. He then became a Miller Postdoctoral Fellow at the University of California at Berkeley, where he has been on the faculty since 1986. An observational astronomer who makes frequent use of the Hubble Space Telescope and the Keck 10-meter telescopes, his primary areas of research are supernovae, active galaxies, black holes, and cosmology; he has also spearheaded efforts to develop robotic telescopes for CCD imaging. His research accomplishments, documented in over 330 published articles, have been recognized by several major awards. Currently he is President of the Astronomical Society of the Pacific. In 1998 he produced a 40-lecture video course on introductory astronomy with The Teaching Company, and in 2000 he coauthored an introductory astronomy textbook. Besides being an avid tennis player and hiker, he enjoys world travel

and is addicted to total solar eclipses, having seen 7 of them (most recently in Zimbabwe). He was a member of the Santa Barbara Astronomy Club (now merged with the AU) from 1973 through the early 1980s.

### **December's Meeting**

Elections: After the usual mudslinging and bitter political battles, the new AU officers and appointees for 2002 are: President – Greg Brinser, Vice President – Pat McPartlin, Treasurer – Gretchen Brinser, Secretary – Craig Prater, Webmaster – Paul Winn, Outreach Coordinator(s) – Edgar Ocampo / Chuck McPartlin, Refreshments Coordinator – Barbara Spinrad, and Newsletter Editor – Chuck McPartlin.

**Speakers:** For Members' Night, we had four speakers. Warren Bitters told us about building his 10" Dobsonian. Jiri Polivka showed us how he used his pocket radiotelescopes to observe solar and lunar noise at 4 and 12 GHz. Laurence Harms gave a brief travelogue of Seoul and a rainy Guam (not Leonid meteors, but real rain). Finally, Bob Michael described the alien lava landscapes of Mauna Loa and Mauna Kea.

# **Holiday Party**

The annual Holiday Banquet at the Beachside was packed with AU revelers. Thanks to Bob Michael for putting on a great party.

#### Thanks, Volunteers!

AU volunteers Gretchen & Greg Brinser, Bob Brown, Joe Doyle, Art Harris, LaQisha Jackson, June Kelley, Pat McPartlin, Edgar Ocampo, Helen Osenga, Craig Prater (the night before an early morning flight!), and Jim Williams showed the sky to 421 customers.

We have "Star Performer" pins that we have been giving to all the outreach volunteers for 2001. Jim Billig, John Boyd, Chey Hahn, Craig Prater, Joann Tanner Rounds, and Clem Walsh have been hiding somewhere, and should contact Edgar or Chuck to pick theirs up.

The outreach schedules are subject to change, so to get the latest information, check the web page bulletin board (under the "Observing" topic), or contact Edgar or Chuck. For example, this month we usually go to Hope School, and Cleveland School wants an outreach in late January, but neither had been scheduled as the Newsletter went to press (early because of the holidays). Try to let one of us know ahead of time if you are planning to show up at an outreach event.

### **AU Observations for January**

<u>Saturday</u>, <u>January 12</u>, 7:30 <u>PM</u> – **Telescope Clinic**, followed by the SBMNH Monthly Star Party.

<u>Saturday</u>, <u>January 12</u>, <u>dusk</u> – Dark Sky at ???. Contact Tony Galván or Paul Winn to find out whether and where it's happening!

<u>Friday, January 18, 7 PM</u> – Monthly public observation at Westmont College.

# **Telescope Clinic**

Before the SBMNH Star Party this month, we will be holding a clinic for new scope owners, or just folks with questions about operating their telescopes. **The clinic will start at 7:30 PM, an hour before the usual observation.** We could use some volunteers to commit to showing up early – especially members with mechanical aptitude and/or experience with the new crop of GoTo scopes. Contact Edgar, Chuck, or Steve if you can help out.

### February's Speaker

For our February meeting, AU member Dale Lowdermilk will show us his impressive collection of meteorites, and tell us a little bit about them.

# **Planet Lineup**

Go out and take a look at the sky along the ecliptic just after sunset between January 17 and January 20. You'll be able to see four planets lined up along a 144° swath of sky. From West to East they are: Mercury, Mars, Saturn, and Jupiter. What the heck – we'll even throw in the Moon for local color!

## **Star Question**

Bill Buzin is intrigued by the history of the use of five-pointed stars on national flags. He's asking members to do some research and let him know what they find out at the next meeting. He has some interesting stories of his own on the subject that he'll share with you.

#### **NEAT Comet?**

The Near Earth Asteroid Tracking Team (NEAT) at NASA/JPL is using two 48 inch telescopes, at Haleakala and Palomar, to search for and track potentially hazardous objects in near Earth orbits. One of the objects they have discovered, 2001 O4, looks like it might be a fairly impressive comet around its perihelion in May of 2004. Highly speculative magnitude estimates, based on its current brightness, have it reaching magnitude 0.9. Of course, if you remember Comets Kohoutek and Halley, you know how that goes. Unfortunately for us, it will be low in the Santa Barbara sky at that time, but should give folks in the Southern Hemisphere a good show. The comet will climb up from Canis Major through the Big Dipper for us in the weeks following perihelion, but it may be dimming rapidly by then.

# **Chaco Canyon Needs You**

Chaco Culture National Historical Park, in the Four Corners area of New Mexico, is looking for **Astronomy Volunteers** to help out at their Observatory. Volunteers are asked to commit to a minimum of six weeks during the Park's principal season, April to November, to provide astronomy and archeo-astronomy programs for park visitors.

You must provide your own RV suitable for housing during that period – the park will provide a full hookup. Park and user fees will be waived, but no stipend, pay, or reimbursement of expenses will be provided, but expenses for services to the park are generally deductible from federal income tax (consult your tax professional!). The park is remote and isolated, with no food concessions. The nearest full grocery stores are 90 minutes away over a 16 mile rough dirt road, cell phones don't work, and mail delivery is "periodic."

Volunteers should be experienced amateur astronomers, capable of manually operating telescopes on Dobsonian and equatorial mounts to locate a reasonable selection of objects for public viewing. You should also be familiar with current scientific astronomical literature.

In return for public night sky programs four nights a week, and solar observing five days a week, volunteers will have access to the Observatory and its equipment (25", 17.5", 14", 13.1", and 70mm scopes; lots of TeleVue eyepieces, and an SBIG ST7-E with AO-7 Adaptive Optics and Color Filter Wheel) at times when it is not in use for public programs.

Want more info? Through March 2002, contact volunteer coordinator Tommy Taylor at 978-263-0904, or thomas.w.taylor@att.net. Or, ask Chuck for a printout of their blurb.

# **New Products Soon!**

Rising like a phoenix from the ashes of the dot com blowout, Ocular Industries is returning with new products to supplement our line of legendary allweather eyepieces. Watch for future announcements!

#### **AU Information Box**

**President:** Greg Brinser 569-9743

88eight8@home.com

**Vice President:** Pat McPartlin 964-8201

macpuzl@west.net

Secretary: Craig Prater 683-5784

craig@di.com

**Treasurer:** Gretchen Brinser 569-9743

88eight8@home.com

Outreach: Edgar Ocampo 964-0914

eocampo26@earthlink.net

Webmaster: Paul Winn 685-5646

strg8zn@home.com

**Refreshments:** Barbara Spinrad 685-4666

uselessiii@webtv.net

**Newsletter:** Chuck McPartlin 964-8201

macpuzl@west.net

### **AU Astronomy Information Pager**

(leave a short message) 564-9002

#### **SBMNH Astronomy Program Coordinator**

Steve Schmidt 682-4711x316

#### **SBMNH Astronomy Program Tape**

(updated monthly) 682-4711x405

**AU AstroNews** is the monthly publication of the **Astronomical Unit** (**AU**), mailed to the general membership. Submit stuff by the 20<sup>th</sup> of the month!

Current annual membership rates are:

Single \$15 Family \$25

Our address is:

Astronomical Unit C/O Santa Barbara Museum of Natural History 2559 Puesta Del Sol Road Santa Barbara, CA 93105-2998

On the Web: www.sbau.org

		1 Happy New Year!	Perihelion (0.983 AU)	3	4 AU Meeting	5 Ф
6	7	8	9	10	11	12 SBMNH Telescope Clinic / Star Party  Dark Sky
13	14	15	16	17	18	19
20	21 Martin Luther King Day	22	23	24	25	26
27	28	29	30	31	January 2002	

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