



AU AstroNews

The Newsletter of the Astronomical Unit

September 2002

Sponsored by the Santa Barbara Museum of Natural History

New Astronomy Program Coordinator

David Totzke is the Museum's new Astronomy Program Coordinator. He comes to us from New Jersey, has a physics background, and has served in the Navy. Let's give him a nice warm welcome!

September's Speaker

The speaker for our meeting this month will be Aristotle Socrates (isn't that a great name?), a grad student working with Dr. Omer Blaes. The title of his presentation will be "*Gravity, Turbulence, and then Light: Black Hole Astrophysics.*"

August Outreach Volunteers

August was a fairly quiet month for outreach. Since the last newsletter, volunteers Liliana & Warren Bitters, Dave Bloom, Gretchen & Greg Brinser, Laurence Harms, Art Harris, June Kelley, Pat McPartlin, Edgar Ocampo, Helen Osenga, Ron Pembleton, Craig Prater, Clem Walsh, and Jim Williams showed the night sky to **450** customers at AU events.

AU Events for September

Friday, September 6, setup 7:30 PM – Monthly meeting in Farrand Hall at SBMNH.

Saturday, September 7, setup 7 PM – Slide show and telescopes for campers at Cachuma Lake.

Saturday, September 7, all night – Dark Sky observing. Contact Paul Winn (strg8zn@cox.net) or Joe Doyle (jdoyle@mrl.ucsb.edu) to find out where and when.

Friday, September 13, setup 7 PM – Telescopes for campers at Refugio Beach State Park.

Saturday, September 14, 6 PM – Planning Meeting in the classroom outside Dave Totzke's office at SBMNH.

Saturday, September 14, 8:30 PM – Monthly Public Star Party at SBMNH.

Friday, September 20, 7:30 PM – Monthly Public Observation at Westmont College's Van Kampen Observatory. The big mirror should be back!

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

AU Camping Trip

The annual campout will be held on the weekend of September 27-28-29 at Cachuma Lake. The Park's Head Naturalist, Liz Mason, has graciously arranged for us to have the Mohawk Shores Group Site once again. We'll hold an observation for the public at Dakota Plains on Friday night. On Saturday, we'll have our usual sumptuous potluck dinner, followed by AU observing at Mohawk Shores. Don't like to camp? Just come up on Saturday evening at 6 PM for the potluck.

Saturn will be rising just after 11 PM, and Jupiter at around 3 AM. At midnight on Saturday/Sunday, the last quarter Moon will skim along the edge of the open cluster M35 at the feet of Gemini. During the day we can enjoy all the activities up there like the Wildlife Cruise Boat, fishing, and nature hikes, not to mention solar observing.

We'll pass around a signup sheet at the September meeting, or you can contact Pat & Chuck at 964-8201 or macpuzl@west.net to sign up for camping and a potluck dish.

CalStar

If the AU campout just wasn't enough, or you couldn't make it, don't despair. There's still CalStar, October 3-5 at Lake San Antonio. Gather with fellow astronomers from Northern and Southern California for a swap meet, dark sky observing, and schmoozing with the turkeys, deer, and wild pigs. For details, visit their website at www.sjaa.net/calstar2002.html

Two Comets

There are currently two comets visible in small telescopes cruising the skies above Santa Barbara. Comet Hoenig (C/2002 O4) is now a circumpolar object of about magnitude 9, wandering through the stars of Ursa Minor. Between now and mid-September, it will move down into the handle of the Big Dipper.

Comet SWAN (C/2002 O6) is brighter at magnitude 6, but it is harder to see because it is in the morning twilight, passing from Leo Minor into Leo.

For ephemerides and finder charts, visit skyandtelescope.com.

Coming to Speak in Santa Barbara

Science writer **Timothy Ferris**, author of *Galaxies*, *The Red Limit*, *Coming of Age in the Milky Way*, and *The Whole Shebang*, will be coming to speak at SBMNH on Friday, February 28, 2003 at 7:30 PM in Fleischmann Auditorium. Professor Ferris has taught five disciplines at four universities, and is currently emeritus professor at UC Berkeley. He's also an amateur astronomer, searching for extragalactic supernovae from Rocky Hill Observatory, which he designed and built. He has a new book coming out in the fall entitled *Seeing in the Dark*. (Maybe it's a guide to buying red flashlights??)

Dr. Ferris also produced the phonograph record launched on the Voyager probes, containing music, sounds of Earth, and encoded photographs as an artifact of human civilization. He has won numerous awards for science journalism.

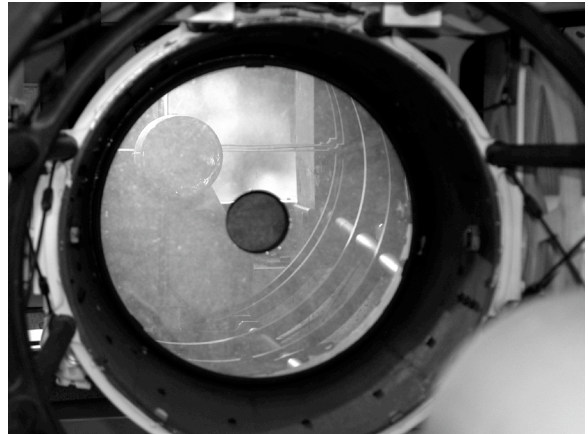
The AU has been asked to set up some telescopes on the grounds of the Museum that evening, so that folks who attend the talk can see some of the cool things in the night sky they've just heard about.

Scope for Sale

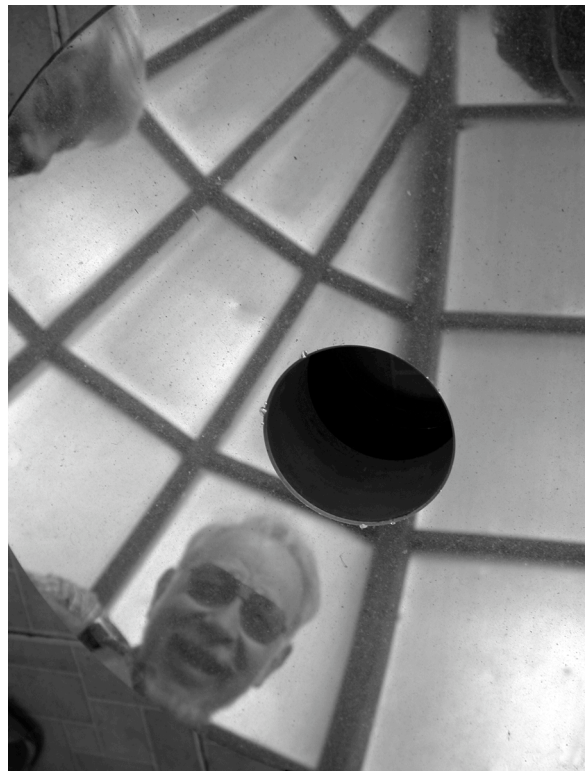
SCO (Southern California Observers) member Don Muhm has a 6 inch Newtonian telescope on an equatorial mount and tripod for sale, with numerous accessories. If you're interested, contact him by phone at (805) 485-3720, or by email at donmuhm@adelphia.net

The Carroll Scope

Thanks to the hard work of Jim Billig and Art Harris, the main mirror of the 16 1/2 inch Carroll Telescope that we use for public observations at Westmont College has been re-aluminized. If you've ever been to one of the observations at Van Kampen Observatory, you know how dirty the main mirror of the big Newtonian/Cassegrain (it's convertible!) scope has been for years. Here it is before it was removed from its mounting:



And here it is on the floor, barely reflecting Art and Jim through the grime:



Come by on a third Friday and see the improvement!



Satellites to the Rescue!

A ship on the ocean is swamped by a giant wave. A small airplane loses power and crash lands on a mountain field. A snowmobiler in Alaska breaks a tread and is lost far from civilization. How do the brave people who rescue folks in peril find out where they are?

Search and Rescue Satellite-Aided Tracking, called SARSAT for short, uses two types of satellites to help people (and their pets!). Geostationary Operational Environmental Satellites, nicknamed "GOES," fly in place. They never stray from their spots above Earth. Polar Orbiting Environmental Satellites, called "POES," are in constant motion. They orbit Earth several times a day. The main job of these spacecraft is to track environmental conditions around the world. But GOES and POES also hear special distress signals from ships, planes, and individuals. The satellites send the information to a control center in Suitland, Maryland. The National Oceanic and Atmospheric Administration, an agency of the U.S. Government, operates the center. They learn who's in danger and where the emergency is. Then they send the Coast Guard or the Air Force to save the day!

NASA provided the satellites used for SARSAT and the National Oceanic and Atmospheric Administration operates them. SARSAT has helped to locate and rescue more than 12,800 people worldwide and 4,300 people in the United States. The Air Force and Coast Guard also rescued dogs and other pets that were traveling with their families when disaster struck!

Find out more about SARSAT at <http://www.sarsat.noaa.gov>. Also check out The Space Place Web site at <http://spaceplace.nasa.gov/goes/orbits.htm> to learn how these satellites orbit Earth and how GOES can hang over one spot all the time!

This article was written by Eric Elkins and provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

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AU AstroNews is the monthly publication of the **Astronomical Unit (AU)**, mailed to the general membership. Submit stuff by the 20th of the month! Current annual membership rates are:

Single \$15 Family \$25

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1	2 <i>Labor Day</i>	3	4	5	6 ● AU Meeting	7 Cachuma Dark Sky
8	9	10	11	12	13 ☾ Refugio Beach	14 AU Planning Meeting SBMNH Star Party
15	16	17	18	19	20 Westmont Public Obs	21 ○
22 <i>Autumnal Equinox</i>	23	24	25	26	27 28 AU Campout at Cachuma Lake	
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