



AU AstroNews

The Newsletter of the Astronomical Unit

September 2006

Sponsored by the Santa Barbara Museum of Natural History

Outreach Summary

Since the last newsletter, AU outreach volunteers Bridget & Andy Allen, Sabina & Marciano Chan, Bill Clausen, Krissie Cook, Jason & Tim Crawford, Coni Edick & Joe Doyle, Art Harris, Jürgen Hilmer, Pat & Chuck McPartlin, Edgar Ocampo, Helen Osenga, the SBMNH Quasar kids, Javier Rivera, Nancy Rohrer, and Tim Wittenburg shared the night sky with **443** people at AU events. As of this report, the AU is **#1 in the nation** for Night Sky Network public outreach events over the last six months!

September AU Events

Here are the events scheduled so far for September. Outreach events are subject to change as additions and cancellations occur. To get the latest information, or directions to an event, just contact Chuck at 964-8201 or macpuzl@west.net.

Friday, September 1, 7:30 PM

AU monthly meetings resume in Farrand Hall at SBMNH. Dr. Ashley Stroupe of NASA's Jet Propulsion Laboratory will be our speaker. Dr. Stroupe has been a Staff Engineer at JPL since December 2003. Her research focuses on multi robot teams in complex environments and behavior based control, with applications to exploration and mapping, dynamic target observation, and cooperative manipulation. In addition to her research, Dr. Stroupe participates broadly in community activities such as outreach and education and has published multiple conference papers, book chapters, and journal articles in robotics.

Saturday, September 2, setup 8 PM

Slide show and telescopes for campers at Cachuma Lake. It's a holiday weekend, so we could use some extra scopes!

Thursday, September 7, 8 to 8:50 PM

OK, not really an outreach event, but there will be a double shadow transit (Io & Europa) on Jupiter as we bid it farewell for the year.

Saturday, September 9, 8 PM

Monthly Public Star Party at SBMNH. See the Black Hole planetarium show, too.

Friday, September 15, setup 7 PM

Monthly Public Telescope Night at Westmont, on the lawn outside Carroll Observatory. The new scope isn't in yet, so bring a scope to set up.

Saturday, September 16, setup 7 PM

Telescopes for Refugio State Beach.

Thursday, September 21 to Sunday, September 24

The annual CALSTAR gathering at Lake San Antonio. Details at: <http://www.sjaa.net/calstar/>

Saturday, September 23, setup 7 PM

Telescopes for Los Padres National Forest Family Camp at Paradise Campground.

Wednesday, September 27, setup 7 PM

Telescopes for Refugio State Beach.



Jupiter is now the only bright planet visible after

the sun goes down, shining in the southwest and passing north of Alpha Librae, Zubenelgenubi, from the 6th to the 17th of September. On the evening of the 11th, Jupiter will come within a half degree of this star. Arabic for “the southern claw,” Zubenelgenubi used to belong to Scorpius. It is a beautiful double star which is easy to split in binoculars. *Mercury* and *Mars* are only 0.16⁰ apart on the 15th, but are lost in the Sun’s glow for observers at mid-northern latitudes. *Uranus* is at opposition on the 5th, and is therefore visible all evening. Look for *Saturn* in the morning sky as it starts to close the gap between itself and Regulus. Saturn has weakened to magnitude +0.5 and is slightly dimmer than it has been for a long time because the rings are less open. During the fall the rings will be tipped by less than 15⁰ from edge-on for the first time in eight years. *Venus* enters its last month of full visibility. By the end of the month it will rise only 40 minutes before the Sun. *The Moon* is full on the 7th, but further from the September equinox than next month’s full Moon will be, so we will have to wait until October for the Harvest Moon!

A Thank-you

Dear Laurence and Ruben:

On behalf of all of us who attended the trip to JPL, I would like to extend our grateful thanks to Ruben Gutierrez and Laurence Harms who were the trip organizers. Traveling comfortably by way of Santa Barbara Airbus, we arrived in Pasadena where we saw for ourselves the JPL facility that designs and builds robotic missions. It is hard to believe that what began as a small test site for rocketry by a handful of Cal Tech students now covers more than 100 acres of buildings manned by some of the finest scientific minds in the world!

For me, it was wonderful to see in person what one normally sees on television. There were scaled and full size vehicles and many exhibits. And the tour guides were very good at answering our questions. As a result of this trip I feel that we should heartily support JPL. Although manned missions are important for our future in space, these unmanned missions also have a place. It’s a lot easier to feed and keep alive a robot! After we left JPL, we went to the California Science Museum. Here we found ourselves with the option of watching IMAX movies or wander through the museum’s exhibits.

One of the exhibits was a full-scale replica of the Cassini Spacecraft. After I returned to Santa Barbara, safe and sound, I thought about all the fantastic things that I saw for the grand sum of \$10. I know that there are plans to go to the newly refurbished Griffith Park Observatory and Planetarium next spring. And, if Laurence and Ruben have anything to do with the planning of this event, it will be wonderful! They were magnificent in planning the trip to JPL. So, thank you again, Laurence and Ruben!

Sincerely,
Tim Crawford

With Stars in My Eyes

by Tom Whittemore

During the dark moon week of August this summer I spent time under some of the darkest skies I have ever seen. Camping at about 8000 feet at the Devil’s Postpile National Monument near Mammoth Lakes earlier in the week, I stalked the night sky with a pair of 9x63 binoculars. The Double Cluster and the “Stick Man,” Stock 2, easily fit into the field of view of my binoculars. Later in the evening, when *Camelopardalis* was up, I turned my attention toward *Kemble’s Cascade*, one of my favorite low-power objects. If you have never seen this accidental collection of stars, I highly recommend it! Composed of primarily 9th magnitude stars, the cascade floats nearly vertically at this time of the year, splashing into the stellar pool of the open cluster, NGC 1502. After two spectacular nights at the Postpile, I moved on to the Grandview Camp in the White Mountains, near the small town of Big Pine. Located at an elevation of 8500 feet, Grandview campground sits in a dry sagebrush and juniper environment. Separated from the Sierra by the Owens Valley, the Whites find themselves in the rain shadow of the Sierra and are actually part of the Basin and Range province which goes up and down all the way to the Wasatch Range in Utah. Here the skies are truly dry and dark! On one of my nights here, I shared stories with a fellow astronomer from Santa Monica who set up several sets of binoculars. Because the views to the south were particularly good, we trained our eyes on many of the gems nestled in Sagittarius and Scorpius. Ptolemy’s Cluster sparkled, and the Butterfly Cluster, M6, led the way to the Pipe

Nebula which was an easy naked-eye object. After I said goodnight to my newfound friend, I headed back to my tent where I had purposely left off the rain fly, and watched the constellations slowly march across the sky: the Great Square, the Circlet of Pisces, the Bull, Orion, and with Gemini on the rise, I closed my eyes and slept until the Sun warmed my tent in the quiet of the White Mountains.



Sunset at Grandview Campground. Photo courtesy of T.W.

Astronomical Arts Corner

Flying at Night

by Ted Kooser, US Poet Laureate

Above us, stars. Beneath us, constellations.
Five billion miles away, a galaxy dies
like a snowflake falling on water. Below us,
some farmer, feeling the chill of that distant death,
snaps on his yard light, drawing his sheds and barn
back into the little system of his care.

All night, the cities, like shimmering novas,
tug with bright streets at lonely lights like his.

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Single = \$15 Family = \$25

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September 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 AU Monthly Meeting 7:30PM	2 Lake Cachuma 8:00PM
3	4	5	6	7 	8	9 SBMNH Star Party 8PM
10	11	12	13	14 	15 Westmont College 7:00PM	16 Refugio State Beach 7:00 PM
17	18	19	20	21 CALSTAR	22  CALSTAR	23 CALSTAR Camp Paradise 7PM
24 CALSTAR	25	26	27 Refugio State Beach 7:00PM	28	29	30 

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