



AU AstroNews

The Newsletter of the Astronomical Unit

May 2004

Sponsored by the Santa Barbara Museum of Natural History

May Meeting

Remember that the May monthly meeting of the AU has been moved from the first Friday (May 7) to Saturday, May 1, at 8 PM. Our speaker will be Dr. Philip Lubin of UCSB. He'll speak about cosmology results gleaned from the small variations seen in the Cosmic Microwave Background.

Dr. Lubin is a professor of physics at UCSB, working in the Experimental Astrophysics and Cosmology Laboratory. His specialty is the study of anisotropies in the CMB radiation, and what they tell us about the origin of the Universe. Dr. Lubin is also active in the RAAP (Remote Access Astronomy Project) outreach activities at UCSB for K-12 students, utilizing a remotely operated telescope which may be commanded over the internet.

Before the meeting, Krissie will be showing a preview of the planetarium show "Ring World", featuring Saturn and the Cassini Mission. It starts promptly at 7 PM, so don't be late!

Two Bright Comets

The comets are called C/2002 T7 LINEAR and C/2001 Q4 NEAT. They get their ugly names from the fact that they were found by automated asteroid discovery and tracking programs. LINEAR is the Lincoln Laboratories Near Earth Asteroid group at MIT, with scopes in New Mexico, and NEAT is the Near Earth Asteroid Tracking group, with scopes at Maui and Palomar run by JPL. Both comets have a good chance of reaching naked-eye brightness in Santa Barbara skies.

T7 LINEAR was visible in binoculars in our western skies before sunset last month, and is now in our morning sky. Around April 22, it will be highest in the morning sky, and on the morning of May 7 it

will be joined by the planet Mercury. It will sink back into the Sun's glare by May 12, and emerge again in the west after sunset around May 22, where it will share the sky with Venus, Q4 NEAT, and Jupiter as it fades to a binocular sight by mid-June.

Q4 NEAT will appear low in our evening skies in early May, and remain a good view through June. In the second week of May, it will be cruising by Sirius, the brightest star in the sky. On the night of May 14/15, it will be near the Beehive Cluster. Between May 22 and May 24 it will be joined by a waxing crescent Moon. As it dims in late June, it will pass by the bowl of the Big Dipper. Overall, as far as brightness and placement for casual viewing go, Q4 NEAT should put on a better show than T7 LINEAR.

Astronomy Trivia

- One light year is ~63,000 AU
- We are 30,000 Lyrs from the center of the galaxy
- Sputnik 2 carried the dog Laika
- Isaac Newton graduated from Cambridge in 1650

April Outreach Volunteers

A big thank you to the AU outreach volunteers, who showed the skies to an impressive 775 customers since the last newsletter went out. That total was reached even though our main monthly star party got clouded out in April! Our volunteers were John Boyd, Joe Doyle, Art Harris, Pat & Chuck McPartlin, Edgar Ocampo, Helen Osenga, Craig & Tenaya & Kenyon Prater, and Tim Wittenburg.

If you haven't done it yet, come on out to an AU outreach event and help out. You'll be surprised how much fun it is to get people excited about astronomy.

AU Events for May

Saturday, May 1, 7 PM

"Ring World" show in the planetarium! Mucho cool!

Saturday, May 1, 8 PM

Monthly meeting at SBMNH in Farrand Hall. Dr. Lubin on cosmology.

Saturday, May 8, 8 PM

Monthly SBMNH Star Party.

Saturday, May 8, 6-7pm

AU Planning Meeting, at SBMNH, in Classroom 1, next to Krissie's office. We'll have deli-style sandwiches! Bring your own beverage and help plan activities for your club!

Sunday, May 9 Mother's Day.

Show Mom the rings of Saturn!

Saturday, May 15, setup 7:30 PM

Telescopes for Family Camp, probably at Sage Hill Campground, but alternately at Paradise Campground, which you should check first, since it's on the way to Sage Hill.

Saturday, May 15, all night.

Dark Sky. Contact Paul Winn or Joe Doyle for place and time.

Friday, May 21, 8 PM.

Monthly Public Telescope Night at Westmont's Van Kampen Observatory.

Saturday, May 22, setup 7:30 PM.

Telescopes for Family Camp, probably at Sage Hill Campground.

Friday, May 28 through Sunday, May 30

RTMC Astronomy Expo at Camp Oakes in Big Bear!

Scheduled events are subject to change and additions with little notice! For the latest and greatest, contact Chuck McPartlin at macpuzl@west.net.

Messier Marathon Report

The conditions for this year's Messier Marathon (on March 20) were the best that we've ever encountered. A layer of low clouds blanketed the coast, holding down the light pollution, while our observing site at the Gun Club provided warm temperatures and clear dark skies. AU marathoners were Greg Brinser, Tim Crawford, Art Harris, Pat & Chuck McPartlin, Edgar Ocampo, and Tim Wittenburg. We were also joined by three visitors from the general public, who caught views of Jupiter and Saturn, including a double shadow transit by Jupiter's moons. Unfortunately, stamina was in short supply, and everyone packed up and went home by 3 AM! There was no shortage of powdered donuts, but Joe Doyle was off in the Southern Hemisphere, and thus unable to provide the inspirational observational leadership we needed.

Conditions were also good for the rare triple shadow transit on March 27/28, which was viewed by Tim Crawford, Art Harris, Chuck McPartlin, Paul Winn, and Tim Wittenburg. Ganymede itself was visible against the clouds of Jupiter, so it almost looked like a quadruple shadow transit.

Third Bright Comet?

Newly discovered Comet Bradfield has shown up in the Southern Hemisphere, where Q4 NEAT has been hiding from us. There's a chance that it will also reach naked-eye brightness in our skies, but it will pass so close to the Sun that it may not survive perihelion passage.

Free Telescope

Complete and fully functional optical tube assembly for a Cave 10" F/5 scope. Needs a mount or could be made into a great Dob. Call Joe at 683-6187.

Deep Sky Observing

Every month several of us go out for deep sky observing, plans often develop just before new moon. If you would like to be on an informal e-mail announcement list please let Joe Doyle know at jdoyle@mrl.ucsb.edu.

AU Patches

Jim Williams has designed and procured a batch beautiful embroidered AU logo patches, and they're available for purchase at \$5 a piece, with proceeds going to the AU. They're the ultimate astronomical fashion statement, and look great on hats, jackets, or even equipment bags and covers. Contact Chuck to get one today!

Improving Viewing on a Dob!

Up north at the Peninsula Astronomical Society near Palo Alto, based at the Foothill Community College there are a lot of armature astronomers that have been working hard on making viewing a lot better out of there Dobs. They found that the majority of the turbulence in a telescope is caused in the area next to the primary mirror. They have been attaching small computer fans to the walls with dampers so not to shake the telescope. Passing a small current of air by the mirror greatly improves the viewing. The question of turbulent air ruining the image appears not to be an issue. As long as the temperature of the air inside the telescope is uniform there is no problem in having a flowing air current inside the tube. Therefore all those grinding your mirrors and building your telescopes, consider adding a small fan at the base of the telescope to greatly improve the viewing.

International Space Station

May 10, 5:15 am	5 min.	12° NNW	24° NNE	11° E
May 11, 4:09 am	2 min.	10° N	11° NNE	11° NE
May 11, 8:37 pm	1/2 min.	11° SSE	11° SSE	11° SSE
May 12, 4:37 am	5 min.	13° NNW	30° NE	13° E
May 12, 9:03 pm	6 min.	11° SSW	53° SSE	11° NE

If you never have seen the ISS passing overhead you are missing out on a great astronomy experience. You can check online for other dates, you can almost certainly find a day that works with you (now try to get the weather to agree). There are also the occasional satellites and passing space shuttle. These objects are to fast to watch with a telescope unless you have it connected to a computer that will let you track it perfectly. I suggest watching them with either small binoculars or simply naked eyed.

AU Information Box

President:	Pat McPartlin	964-8201	parsnip7@yahoo.com
Vice President:	Chuck McPartlin	964-8201	macpuzl@west.net
Secretary:	K & K Pfeiffer	687-2327	Keagle10@cox.net
Treasurer:	Bob Brown	683-2138	BobBrownSB@cox.net
Outreach:	Chuck McPartlin	964-8201	macpuzl@west.net
Webmaster:	Paul Winn	685-5646	strg8zn@cox.net
Refreshments:	Edgar Ocampo	964-0914	Eocampo26@earthlink.net
Newsletter:	Gustavo Litvin	971-6654	shadess@umail.ucsb.edu

AU Astronomy Information Pager

(Leave a short message) 564-9002

SBMNH Astronomy Programs Coordinator

Krissie Cook 682-4711x316
kcook@sbnature2.org

SBMNH Astronomy Programs Tape

Updated Monthly 682-4711x405

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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