

ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 52, No. 6 – JUNE 2004

JUNE 16, 2004 – GENERAL MEETING

7:00 PM DOORS OPEN
7:30 PM ANNOUNCEMENTS
8:00 PM SPEAKER

ANCIENT CHINESE ASTRONOMY

NAISHI MIN

Our June speaker is Naishi Min, who has been the director of the Shanghai, China, Planetarium for many years. Mr. Min is very interested in developing unique ways to

explain astronomical principals. He is a scientist and a fine artist, and has developed many three dimensional models to explain astronomy to the public. Many of his books feature "pop-ups" that show how the Solar System works at a glance. He is also a historian, and has painted beautiful models of Ancient Chinese observatories

and astronomical devices that he will share with us. We will see how the ancient Chinese ordered the night sky, and the philosophy behind it, and how the constellations differ from from the Western version. He will also discuss the Chinese Zodiac.

Naishi Min worked for many decades to invent a device that works like a planisphere that would allow the user to always know where to find the planets. He calls his special creation the VeMarsJuSa, and he will demonstrate it to us.



Mr. Min currently lives in the Bay Area with his daughter, Anchee, but will soon be returning to Shanghai to judge a special astronomy competition. 40,000 Chinese interested in astronomy will participate, and many of them will be using the VeMarsJuSa.

Be sure to come to this special meeting of the SFAA, and bring a friend. This promises to be a unique event. Your speaker coordinator is very pleased he will be with us, and hopes the other Bay Area clubs will also invite him to speak.

2003 CLUB OFFICERS & CONTACTS

President	Michael Portuesi	(415) 550-9366
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MEMBERSHIP DUES

The mailing label on the back of this issue shows the month and year through which your membership was paid. If the date has passed, your membership has expired. Members may receive no more than one bulletin after the expiration of membership.

Please renew soon if your membership is expiring.

ONLINE SERVICES FOR SFAA MEMBERS



The SFAA's Secretary's Web Site helps keep SFAA information together and accessible to members. The site URL is <http://www.whiteoaks.com/sfaa/>. At this site you can find such information as minutes from meetings of the Board of Directors, the SFAA official by-laws, and other information. SFAA also offers email lists to supplement the bulletin board offered at the SFAA's official web site. At present there are two email lists – an unmoderated list for use primarily for business and discussion by the Board of Directors (but open to all members), and a moderated announcement list for all SFAA members. If you would like to be added to the SFAA-announce email list, please contact the secretary (<mailto:secretary@sfaa-astronomy.org>) and let him know. You can also sign up for the list yourself at this URL: <http://www.whiteoaks.com/mailman/listinfo/sfaa-announce>

Above the Fog is the official bulletin of the San Francisco Amateur Astronomers. It is the forum in which club members may share their experiences, ideas, and observations. We encourage you to participate by submitting your articles, announcements, letters, photos and drawings. We would also like to hear from our new members. Tell us about yourself – what you have done in the past and what other clubs you have joined. The deadline for the next issue is the seventh day of the month. Send your articles to Phil Estrin at pestrin@dir.ca.gov.

CLUB TELESCOPES

The SFAA owns 4 club loaner telescopes, Dobsonian/Newtownian reflectors: 6" f/10, 8" f/7, and 10" f/8 and a Starblast. They are available for extended periods (30 days or more) to SFAA members. These are generally very fine scopes, easy to use and well-suited for deep sky, planets, and star parties. The loaner custodians are Pete Goldie & Sarah Szczechowicz, located in San Francisco. If you are interested in borrowing a scope, or if you have items you can donate for the loaner program (eyepieces, star maps/books, collimator, etc.) please contact them via email (<mailto:pg@lbin.com>) or phone (415-206-9867). Email communication is preferred and strongly recommended for a quick and accurate reply.



CLUB ASTRONOMY VIDEOS

The SFAA owns a series of astronomy videotapes featuring Alex Filippenko, a world-renowned professor of astronomy at UC Berkeley. The videotapes provide an introduction to astronomy and cover topics such as the Solar System, the lifecycles of stars, the nature of galaxies, and the birth of the Universe. The SFAA loans the tapes free to all members. If you are interested in viewing these tapes, you may check them out at any of the SFAA General Meetings. These tapes were kindly donated to the SFAA by Bert Katzung. Our librarian is Dan Christian.



For information on the course tapes themselves:

<http://www.teach12.com/ttc/assets/coursedescriptions/180.asp>

FROM YOUR PRESIDENT MICHAEL PORTUESI

Summertime beckons, and so do our SFAA special events for the season.

We're having a summertime telescope viewing at Fremont Peak Friday, July 9. Fremont Peak is near San Juan Bautista, about 100 miles south of San Francisco. It has an amateur observatory housing a 30-inch reflector telescope, one of the largest in the Bay Area. Views through the eyepiece of this scope approach the kind of detail you see in photographs. It is not to be missed!

Ken Frank will be the telescope operator that night. He'll be working through the finest summertime deep-sky objects, and he'll take requests if there's something special you want to see. You can bring your own telescope, but on this trip no telescope is necessary – we'll provide all the sights.

In addition to views Ken will be offering through the 30-inch, I'll have my own "warmup act" to offer. I'll be showing sights to club members using my 15-inch reflector. I will select items from the TAC Eye Candy List(<http://www.observers.org/observing/eyecandy/>) This list, assembled by Bay Area observers, is a guide to the finest sights in the sky that are not already on the Messier List.

If driving back home at night from Fremont Peak does not appeal to you, you can reserve a camping site within the park. Or you can book a room at the San Juan Inn at the base of the mountain. The Inn's phone number is (831) 623-4380.

Everyone who went on the Fremont Peak trip last year had a great time. It was one of my favorite SFAA events last year, and I'm really looking forward to it this year.

Also, mark your calendars for the SFAA Yosemite Glacier Point trip, Friday August 20 and Saturday August 21. We have a great weekend for lunar observing in the early evening, with dark sky observing by 11 pm.

Finally, our Annual Picnic will be held Saturday, September 11. The picnic will be held at Ken Frank's residence in Tiburon, easily accessible by car or by ferry plus public transit. You can bring your telescope for evening observing at Ken's place, or head out for dark sky observing once the picnic winds down.

I hope there's something for you to like!

IMPORTANT UPCOMING DATES

BOARD MEETING
JUNE 9 – JULY 14 – AUGUST 11

7:00 P.M.

Western Addition Library

Scott & Geary Streets, San Francisco

SFAA GENERAL MEETING & LECTURE

JUNE 16 – JULY 21 – AUGUST 18

7:00 P.M. DOORS OPEN

7:30 P.M. ANNOUNCEMENTS

8:00 P.M. SPEAKER

*Randall Museum, 199 Museum Way
(near 14th Street and Roosevelt)*

CITY STAR PARTY

JUNE 12 – 7:30 P.M.

JULY 10 – 7:30 P.M.

AUGUST 7 – 7:00 P.M.

EDITORIAL NOTE

May's ATF article on Summer Astronomy Bootcamp <http://www.sfaa-astronomy.org/sfaa/newsletter/2004-05.pdf> should have been credited to Kenneth Quon. Mr. Quon can be reached at quon@riverstonenet.com



MONDAY . JUNE 7, 2004 . 8:30 PM-11:00 PM PDT
TRANSIT OF VENUS WEBCAST
LIVE @ THE EXPLORATORIUM

PHYLLIS C. WATTIS WEBCAST STUDIO AND SKYLIGHT AREA

JULIE SUH <mailto:julies@exploratorium.edu>

Join us for an enchanted night of astronomy, science, Greek culture, and fun! The Exploratorium hosts a special evening engagement to honor the Transit of Venus, the rarest of all eclipses. Come to the Exploratorium and watch the transit LIVE from Greece in the Phyllis C. Wattis Webcast Studio.

Highlights:

- * Participate in a live Webcast from Greece, from 10:00 p.m. to 10:45 p.m. PDT.
- * Watch Venus begin its path across the Sun.
- * Hear Exploratorium Senior Scientist Paul Doherty explain the science behind the transit.
- * Take a Transit of Venus walkabout with Exploratorium teacher Tory Brady.
- * Engage in hands-on, astronomy-related activities with the Physics of Toys and Exploratorium Outreach staff.
- * Watch a live performance by the Minoan Dancers Greek Folklore Dance Ensemble.
- * Enjoy Greek treats and refreshments.

The entire museum will also be open for you to explore. Since the Transit is not viewable from the West Coast, the Webcast provides a perfect opportunity to savor this rare event. For more information about the event and to RSVP*, please call: 415-353-0448. (*RSVP recommended, but not required to attend.)

For more information about the Transit of Venus, check out our Web site: <http://www.exploratorium.edu/venus>



SOLAR VIEWING FOR KIDS

SATURDAY, JULY 17, 1-3 PM

100 LARKIN STREET (AT GROVE) , SAN FRANCISCO . CHILDREN'S CENTER BALCONY

SF Amateur Astronomers will focus their telescopes on the sun (using special filters) so that we can see the star closest to us.

Plans have not been finalized yet, but we may also have a 15-minute talk about the Sun at 1pm, provided by Michael Portuesi, President of the San Francisco Amateur Astronomers. We will also have a few prisms available for hands-on activities.

Kids of all ages and their parents are invited.

SF Public Library Homepage: <http://sfpl.lib.ca.us/>
Main branch phone: (415) 557-4400

SFAA Homepage: <http://www.sfaa-astronomy.org>
SFAA Hotline: (415) 289-6636

YOSEMITE - AUGUST 20-21, 2004 SFAA STAR PARTY AT GLACIER POINT



The annual Yosemite star party is held at Glacier Point, hosted by the NPS and Ranger Dave Balogh. Camping is at the Bridalveil Creek campground (the group site, rather primitive). There is room for several tents. There is cold water and a deep sink adjoining the toilets but no showers. The camp is 8.5 miles away from Glacier Point.

We are given free admission and camping space. In exchange, we provide two public star parties at Glacier Point, on Friday and Saturday night. We'll have the public (about 200 - 300 people) from twilight for a few hours, and then the rest of the night (and all day) to ourselves. Mighty good deal, seeing how some people come 10,000 miles to see those rocks.

We may take a maximum of 30 people, with priority given to SFAA members. We are expected to have at least one public telescope for every two people. If you wish to go, email Ken Frank with the number of people and telescopes. I'll be at the SFAA meetings and star parties where you can pick up the entrance pass, map and page of rules.

A note for non-members and those not making the list: Yosemite is your park, and anyone may come if they arrange their own accommodations. In this case, you would be welcome to join us at Glacier Point for the public star party and the observing afterward. But you would not be obligated to set up for the public; there are some useful spots that would leave you mostly alone. You would have to follow the ranger's rules for driving in to unload, then parking in the regular lot (as do we all).

When you arrive at Yosemite, make your way up to the Bridalveil Creek campground. This is close to Bridalveil Falls, but upriver from it; the driving

distance is 18 miles, uphill. Allow at least an hour from the Falls parking lot; make a stop at the Wawona Tunnel overlook, which is *the* classic view of Yosemite Valley. Try to reach the camp by 5 pm.

At the campground, look for the group camp, with several regular campsites with "Reserved for SFAA" on the space marker. We won't know exactly what this consists of until we get there, so we'll need to be flexible when we arrive. Pick out a place to sleep, set up tent, as needed and do use the bear box for all food items.

Glacier Point is another 8.5 miles up the road. Allow time to find your way and set up; the summer sunset is late, so there's plenty of time. There is electricity in the observing area, but you may need a long extension cord. We usually are setting up by 7:30, and it's a good idea to be there earlier, as we can bring in only a few vehicles at a time.

Drive in, unload your scope stuff, then immediately park your vehicle by the toilets. If we do this quickly, there will be no car line. Then we can leisurely set up after. The observing area is open, with good views from about NNW to the east, around to due south. From south around past west is partially to mostly blocked by tall trees. Still, there's a lot of open sky, and typically, the seeing and transparency are excellent. It is warm (70 to 90) during the day, and cool to chilly (40's) at night, due to the elevation, 7200 feet.

One of the rangers does a sunset talk, and then delivers the crowd to us. Many will have flashlights, (we'll provide red plastic and rubber bands) however and need to be tolerant of that. Pick out an object that you are familiar with, tell about it, etc., just as we do at Lands End

and Rock Springs on Mt. Tam. We'll have a list and accompanying chart of suggested objects to show. Expect questions. By 2216 after the Moon sets, we'll have the place to ourselves, and can stay until dawn, or you drop...whichever occurs first. Scopes to be removed when we quit, then set up again on Saturday.

Because of the altitude, I recommend getting plenty of sleep during the day, take a few aspirin and call me later.

The Sun 2004- 8-20 Diameter: 31.6 '
Distance: 1.0116 au
Position Angle: 18.1
Pole inclination: 6.9
Central meridian: 327.0
Rise: 0623
Azimuth:+74°02'
Culmination: 1306
Set: 1948
Azimuth:+285°58'

Moon
Magnitude: -8.70
Diameter: 31.7 '
Illuminated Fraction: 0.253
Phase: 120 °
Distance: 377036.7 km
Position Angle: 19.4
Libration in latitude: 0.11
Libration in longitude: -5.33
Rise: 1057
Azimuth:+99°25'
Culmination: 1641
Set: 2216
Azimuth:+258°21'

Saturday 21st
Planet
Sun 2004- 8-21 19h00m
Diameter: 31.6 '
Distance: 1.0114 au
Position Angle: 18.4
Pole inclination: 7.0
Central meridian: 313.7

Yosemite 2004-8-21 19h00m (TU + -
7h00m)
Rise: 0624
Azimuth:+74°28'
Culmination: 1305
Set: 1947
Azimuth:+285°32'

Phase: 107 °
Distance: 373754.0 km
Position Angle: 16.5
Libration in latitude: 1.70
Libration in longitude: -4.89

Set: 2246
Azimuth:+251°02'
Longitude: 119 deg 34.6 min
Latitude: 37 deg 43.5 min
Elevation: 7200 feet or 2195 m
WGS84

Planet
Moon 2004- 8-21 19h00m
Magnitude: -9.32
Diameter: 32.0 '
Illuminated Fraction: 0.354

Yosemite 2004-8-21 19h00m (TU + -
7h00m)
Rise: 1205
Azimuth:+107°04'
Culmination: 1729

These calculations do not allow for local horizon, so there may be error to rise and set times.

Information format courtesy of Jim Van Nuland of SJAA

JULY 9 SFAA NIGHT AT FREMONT PEAK OBSERVATORY KENNETH FRANK

You may be interested in having an evening with a little quality time with a very large telescope. Mark your calendar for the night of Friday, July 9th. I have reserved the Fremont Peak Observatory that evening for a private gathering of members of SFAA, as Mojo & Jane did last May.

The Fremont Peak Observatory features a fine 30-inch f/4.8 newtonian telescope built by Kevin Medlock of the Eastbay Astronomical Society. The telescope is mounted on an English cross-axis equatorial mount. There are also powered observing pads outside the observatory, new this year, where visiting astronomers can set up to observe in Fremont Peak's dark skies.



Our July 9th party date is a third-quarter moon weekend, and there will be plenty of spectacular summer deep-sky objects to see: the M57 Ring Nebula and the Double Double in Lyra, Veil Nebula and North America Nebula in Cygnus, M20 Trifid Nebula, M8 Lagoon Nebula and M17 Swan Nebula in Sagittarius, M13 globular cluster in Hercules, M5 Globular Cluster in Serpens, M22 globular cluster in Sagittarius, M6 and M7 open clusters in Sagittarius, and lots, lots more.

FPOA's annual StarBQ is the 17th, if you're interested in attending. Mt. Tam star party is July 24th, so if you can, make plans that allow you to attend all events.

From April through October, Fremont Peak Observatory conducts programs for the public at least three Saturday evenings a month, excluding the Saturday closest to full moon.

Attendance at the SFAA Fremont Peak party is limited, so please reserve your place by sending email to kennethfrank@planitarium.net, or call me at 415 789 0459.

Fremont Peak State Park is about 100 miles south of San Francisco, and eleven miles south east of the town of San Juan Bautista. The park features camping facilities which are available either by reservation or first come first served basis. Please be sure and pay the day or or if camping the overnight fee in the green box by the public phone. At the bottom of the hill in San Juan Bautista is the San Juan Inn for those who would like more civilized overnight amenities.

For more information about Fremont Peak Observatory, including excellent directions to the park and observatory, visit their web site at <http://www.fpoa.net> Hope to see you there.

"DOME SWEET DOME"

JANE HOUSTON JONES

jane@whiteoaks.com



PROCELLARUM VOLCANIC GROUP
2004 APRIL 12
CREDIT: [JOHANNES SCHEDLER](#)

The 12-day-old waxing Moon brings sunrise to western Oceanus Procellarum, the ocean of storms. That means Aristarchus and Vallis Schroteri are near their visible best on this night, a night that Mojo and I set up our two sidewalk telescopes on a Monrovia corner sidewalk.

We were soon joined by Mark and Lisa Rooney, fellow members of the Los Angeles Astronomical Society (LAAS) and the Sidewalk Astronomers who we met just the week before at a Griffith Park star party. Mark set up his Meade LX200 next to our two scopes. Soon we were joined by LAAS members Dave Nakamoto and Tim Thompson, who provided telescope nudging relief and astronomical interpretation to the nearly 200 visitors to our eyepieces over the next two hours. Mojo aimed at Jupiter. Mark aimed at Saturn, and I got dibs on the Moon.

If you are a lunatic like me, the Vallis Schroteri region is an area of never ending awe. This part of Oceanus Procellarum is rich in volcanic structures. Selected as a landing site for the Apollo missions, it lost out to Hadley Rille as Apollo 15th's landing site. Among the many interesting features in this area is the bright young crater, Aristarchus. You've all seen a bright white crater northwest

of Copernicus. That's Aristarchus! It almost looks like someone put a dab of whiteout on a crater. Aristarchus is even visible on the night side of the moon during Earthshine!

Telescopes of all sizes can pick out Vallis Schroteri, the largest sinuous valley on the moon. At the beginning of the snakelike valley is the cobra head feature, a 10 km widening just north of a tiny crater.

The valley meanders in a "U" shape for 160 kilometers from the crater Herodotus to the south. At some points the valley narrows to only 500 meters wide. It terminates at a 1,000 meter high precipace on the edge of an uplifted tetragonal shaped continent called the Aristarchus Plateau. David Nakamoto commented that the plateau really did appear elevated with respect to the surrounding lunarscape when he took a look.

That's the beauty of frequent lunar observing. You really see amazing details when the sun angle is just right, and hour by hour, the angle shows old favorite features in a new light, literally.

Another unusual landscape that was starkly lit by sunrise was the Marius Hills. This area, like all the features I mention in this write-up look best at sunrise, 4 days after first quarter or at sunset, 4 days after last quarter. This is an area of 300 small steep-sided hills and domes.

The best way for me to describe it in words is that it looked like shadows over a piece of pebbly laminate, like the ebony star or Wilsonart pebble sand laminate on the sides of my telescope. If I pretend a piece of laminate is the surface of moon near the terminator, and I shine a flashlight across it at a low angle, mimicking a rising sun over the laminate, the raised "bumps" look like the Marius Hills with shadows pointing away from the flashlight or away from the sunrise.

That's what the Marius Hills looked like to me: Hundreds of small bumps, each with a shadow facing the terminator. It was quite an amazing sight!

There are many interesting studies of lunar domes. C. Weitz and J. Head of JPL studied the volcanic features of the Marius Hills complex using multispectral data from the Clementine UV- visible camera, and compared them to other lunar domes and cones. An abstract of their work is provided below, as are some images and observing notes. I hope this article encourages you to observe familiar areas of the moon and look for some of the amazing lunar domes.

Spectral Properties of the Marius Hills <http://www.agu.org/pubs/abs/je/1998JE000630/1998JE000630.html>
The Hitchhiker Guide to the Moon <http://www.shallowky.com/moon/hitchhiker.html> - click on the numbered sections for observing notes of the areas. These sections correspond to the Rukl Atlas of the Moon maps. Aristarchus Map 18, Marius Hills Map 29.
Lunar Photo of the Day images of the Procellarum Volcanic Group <http://www.lpod.org/LPOD-2004-04-12.htm>
More on lunar domes http://www.uai.it/sez_lun/domes.htm
Lunar links galore <http://www.shallowky.com/moon/moonlinks.html>
Prospective Apollo landing sites, including the Marius Hills <http://www.lpi.usra.edu/expmoon/orbiter/orbiter-sites.html>

SOFIA UPPER DECK SCIENCE OPPORTUNITIES WORKSHOP PETER JENNISKENS

Registration deadline - June 10, 2004

Extended abstract submissions - June 15, 2004 Workshop - June 22-23, 2004

Widefield objects such as comets, transient phenomena such as meteors and gamma-ray bursts, and observations that need precise photometry may one day be possible from the Upper Deck of the SOFIA Stratospheric Observatory For Infrared and submm Astronomy, in serendipitous observations through the adapted aircraft windows. Such airborne small-telescope astronomy may add to ongoing studies with the main telescope, or be used for independent long-term surveys, preferentially using the high altitude, the low scintillation and the low water vapor background to the benefit of addressing NASA and DLR roadmap goals.

In order to investigate the science questions that could be addressed uniquely in potential future research experiments on the SOFIA Upper Deck, NASA's Space Science APRA program and NASA's Earth Science Enterprise are co-sponsoring a workshop:

SOFIA UPPER DECK SCIENCE OPPORTUNITIES WORKSHOP June 22-23, 2004 NASA Ames Research Center, Moffett Field, CA

We are soliciting extended (2-5 page) abstracts that will be published on-line prior to the meeting. From that library, the important science questions will be summarized in a white paper, writing tasks for which will be allocated at the workshop.

If you can not attend the meeting but like to contribute, please submit an extended abstract. This will be posted online and be part of the workshop proceedings. Register as normal, but select the "paper only" option.

More information on the workshop and registration can be found at: <http://surf.arc.nasa.gov>

Scientific Organizing Committee

Peter Jenniskens (SETI Institute)

Hansjuerg Jost (BAER Institute)

Tim Castellano (NASA Ames Research Center)

Leonhard Pfister (NASA Ames Research Center)

Frans Rietmeijer (University of New Mexico Albuquerque)

Ray Russell (The Aerospace Corporation)

Hans Stenbaek-Nielsen (University of Alaska Fairbanks)

Mike Taylor (Utah State University)



2004 MT TAM ASTRONOMY PROGRAMS
TINKA ROSS

MT TAM ENTHUSIASTS
LOOKING FORWARD TO SEEING YOU ON THE MOUNTAIN!

Our astronomy programs are on the Saturdays near the First Quarter Moons (not new moons). The Madrone Picnic Area (next to the Mt Theater) is reserved 1 1/2 hours before each program for informal gathering. Bring your picnic supper and meet the speakers before the talk. We have added two storytelling evenings - suitable for young and old alike. No telescope viewing with these programs.

2004 MT TAM ASTRONOMY PROGRAMS

JUNE 26 - 8:30PM
DR. JEFF MOORE
NASA-AMES RESEARCH CENTER

"FORTHCOMING EXPLORATION OF THE PLUTO SYSTEM"
The distant planet Pluto and the Kuiper Belt Objects will be the last members of our Solar System to be visited by spacecraft.

JULY 24 - 8:30PM
DR. SAUL PERMUTTER,
LAWRENCE BERKELEY LABS

"SUPERNOVAE, DARK ENERGY AND THE ACCELERATING UNIVERSE"
Astronomers use exploding stars to investigate one of the biggest scientific mysteries of our day.

AUGUST 21 - 8:00PM
DR. PHILIP PLAIT
SONOMA STATE UNIVERSITY

"BAD ASTRONOMY: FACING DOWN THE 'FACE' ON MARS"
The recent spate of nonsense circulating the web involving the Red Planet will be debunked with science, simple logic and a dose of humor.

SEPTEMBER 18 - 7:30PM
DR. PASCAL LEE
MARS INSTITUTE/NASA-AMES

"HUMANS ON MARS"
Research in the Antarctic is being used for feasibility studies preparing the way for humans to explore the planet Mars.

OCTOBER 16 - 7:30PM
DR. EMMA BAKES
SETI INSTITUTE/NASA-AMES

"EXPLORING THE MEANING OF LIFE"
There is evidence for the universal formation of life throughout the cosmos.

2004 MT TAM STORYTELLING

JULY 10 - 7:30PM-
DOREEN DEVORAH
DAVID PONKEY

Doreen Devorah
"ANDREW P. HILL AND THE BEGINNING OF OUR STATE PARK SYSTEM"
David Ponkey

"THE LABOURS OF HERCULES: A STORY WRITTEN IN THE STARS"

OCTOBER 23 - 5:00PM
MARY ELLEN HILL

"WE ARE THE STARS THAT SING: THE STORY OF THE UNIVERSE"

[DOBSON2000] SUMMER ASTRONOMY BOOTCAMP JULY 18 - 23, 2004

San Francisco State University is offering a week long course in observational astronomy this summer from July 18-23 at its scenic Sierra Nevada Field Campus.

I took the class last year and it was a great hands-on course. In fact, it was my major inspiration for taking John Dobson's telescope building class this past fall.

You learn to identify the various constellations and read star charts. They had several 16" and 17" Dobsonian telescopes which we used each night. We mostly looked at Messier objects, however, one ambitious student was able to observe Pluto! Perhaps, someone will see Sedna this year. :-)

The campus and class schedule is very nice. Although you don't have to, most people choose to live at the campsite during the week. The university has large tents as well as

bathrooms and showers. They also have dining facilities which serves breakfast/dinner and provides bagged lunches.

The astronomy lectures are in the afternoon so most people go hiking or lake swimming during the morning. After lectures, you get a couple of more hours to relax and have dinner. We then drive up to the observation point and usually stay until the wee hours.

The "final" is a star party, although last year it was overcast so it was a little disappointing.

For more information on the campus and class, check out:

<http://www.sfsu.edu/~sierra>
<http://www.sfsu.edu/~sierra/astrcl.htm>

Or feel free to e-mail me directly. Best regards, Ken

ASTROCON - VOLUNTEERS NEEDED (JULY 17 - 24, 2004)

Mike D. Reynolds, Ph.D. . Co-Chair . AstroCon 2004

First of all, thanks for some of the speedy responses I've already received in regard to my e-mail sent yesterday. I also appreciate the support and enthusiasm for AstroCon; it is a historic opportunity to host these four organizations--The Astronomical League, American Association of Variable Star Observers, Association of Lunar and Planetary Observers, and The Astronomical Society of the Pacific--a first for all four to meet together.

Some have asked about our specific volunteer needs; I am attaching a matrix which overviews specifics.

I forgot to include in my earlier e-mail that we are going to give each volunteer an AstroCon T-shirt, designed by our own Debbie Dyke, and 1/2 day registration for each 1/2 day volunteer assistance. See the shirt design at <http://www.astrocon2004.org/~ddfam/shirtsemifnl.html> -- we've going with the royal blue color. I normally don't buy a



shirt, but these are so striking I had to purchase one! (BTW: we'll also have an AstroCon 2004 pin.)

One of the "tricks" of AstroCon is, to the point, not to lose money. We've been tight on our budget, watching our expenses, and trying to be prudent with the funds we have. And at the same time, we need to offer attendees an exciting and outstanding convention! We all know what the Bay Area has to offer...but try this on a budget. Even

the hardworking AstroCon Committee members are paying for the various events and tours, like Lick, Chabot, and the USS Hornet.

Please let me know if you have any questions. I will be out 6/2-13 for some little astronomical event, something about a transit...

Thanks for all of your support, both volunteer and financial. We look forward to hearing from you!

Looking Up!
Mike

Day, Date	Need	Time	Length	No. of Volunteers
Saturday, 17 July	<i>Hornet Observing</i>	8:00 PM to 11:00 PM	3 hours	10 to 20
Tuesday, 20 July	<i>Prepare Registration Packages</i>	1:00 PM to 3:00 PM	2 hours	5
Tuesday, 20 July	<i>Registration</i>	4 PM to 8 PM	4 hours	5
Wednesday, 21 July	<i>Registration</i>	8 AM to 12 Noon	4 hours	4
Wednesday, 21 July	<i>Main Ballroom</i>	8 AM to 12 Noon	4 hours	1
Wednesday, 21 July	<i>Vendors set-up</i>	8 AM to 12 Noon	4 hours	2
Wednesday, 21 July	<i>Luncheon</i>	11:45 AM to 1:45 PM	2 hours	1
Wednesday, 21 July	<i>Registration</i>	12 Noon to 4:00 PM	4 hours	4
Wednesday, 21 July	<i>Vendors</i>	12 Noon to 4:00 PM	4 hours	1
Wednesday, 21 July	<i>Main Ballroom</i>	1:30 PM to 4:00 PM	2.5 hours	1
Wednesday, 21 July	<i>Quarter Deck-- Astronomical League Parallel Session</i>	1:30 PM to 4:30 PM	3 hours	1
Wednesday, 21 July	<i>Lick Observatory Tour</i>	4:00 PM to ???	???	<i>unknown</i>
Wednesday, 21 July	<i>Registration</i>	4:00 PM to 7:00 PM	3 hours	1
Thursday, 22 July	<i>Registration</i>	8 AM to 12 Noon	4 hours	4
Thursday, 22 July	<i>Main Ballroom</i>	8 AM to 12 Noon	4 hours	1
Thursday, 22 July	<i>Vendors</i>	8 AM to 12 Noon	4 hours	1
Thursday, 22 July	<i>Astronomical League Council</i>	9 AM to 5 PM	8 hours	<i>unknown</i>
Thursday, 22 July	<i>Luncheon</i>	11:45 AM to 1:45 PM	2 hours	1
Thursday, 22 July	<i>Registration</i>	12 Noon to 4:00 PM	4 hours	4
Thursday, 22 July	<i>Vendors</i>	12 Noon to 4:00 PM	4 hours	1
Thursday, 22 July	<i>Main Ballroom</i>	1:30 PM to 5:00 PM	3.5 hours	1
Thursday, 22 July	<i>Vendors</i>	4 PM to 6 PM	2 hours	1
Thursday, 22 July	<i>Chabot Space & Science Center</i>	6 PM to 12 midnight	6 hours	<i>unknown</i>
Friday, 23 July	<i>Registration</i>	8 AM to 12 Noon	4 hours	2
Friday, 23 July	<i>Main Ballroom</i>	8 AM to 12 Noon	4 hours	1
Friday, 23 July	<i>Vendors</i>	8 AM to 12 Noon	4 hours	1
Friday, 23 July	<i>ASP Board Meeting</i>	9 AM to 5 PM	8 hours	<i>unknown</i>
Friday, 23 July	<i>Luncheon</i>	11:45 AM to 1:45 PM	2 hours	1
Friday, 23 July	<i>Registration</i>	12 Noon to 4:00 PM	4 hours	2
Friday, 23 July	<i>Vendors</i>	12 Noon to 4:00 PM	4 hours	1
Friday, 23 July	<i>Main Ballroom</i>	1:30 PM to 5:00 PM	3.5 hours	1
Friday, 23 July	<i>Quarter Deck-- Astronomical League Parallel Session</i>	1:30 PM to 5:00 PM	3.5 hours	1
Friday, 23 July	<i>Vendors</i>	4 PM to 6 PM	2 hours	1
Friday, 23 July	<i>ASP Annual Dinner</i>	6 PM to 10 PM	4 hours	<i>unknown</i>
Friday, 23 July	<i>ALPO Board Meeting</i>	7 PM to 10 PM	3 hours	<i>none</i>
Saturday, 24 July	<i>Registration</i>	8 AM to 12 Noon	4 hours	2
Saturday, 24 July	<i>Main Ballroom--ASP Outreach Workshop</i>	8 AM to 12 Noon	4 hours	1
Saturday, 24 July	<i>AAVSO Membership Meeting</i>	8 AM to 12 Noon	4 hours	1
Saturday, 24 July	<i>Vendors</i>	8 AM to 12 Noon	4 hours	1
Saturday, 24 July	<i>Luncheon</i>	11:45 AM to 1:45 PM	2 hours	1
Saturday, 24 July	<i>Registration</i>	12 Noon to 4:00 PM	4 hours	2
Saturday, 24 July	<i>Vendors--break down following afternoon break</i>	12 Noon to 4:00 PM	4 hours	3
Saturday, 24 July	<i>Main Ballroom</i>	1:30 PM to 5:00 PM	3.5 hours	1
Saturday, 24 July	<i>Astronomical League Membership Meeting</i>	1:30 PM to 5:00 PM	3.5 hours	1
Saturday, 24 July	<i>Banquet--USS Hornet</i>	6 PM to 11 PM	5 hours	2
Saturday, 24 July	<i>Hornet Observing</i>	8:00 PM to 11:00 PM	3 hours	10 to 20

Founded in September 1952, the San Francisco Amateur Astronomers (SFAA) is an association of people who share a common interest in astronomy and other related sciences. Our membership consists of people from all walks of life, educational backgrounds and ages. Many SFAA members own their own telescopes; some have been made by hand in local telescope-making classes and vary in size from 6 to 25 inches.

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