

★ ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 54, No. 6 – JUNE 2006

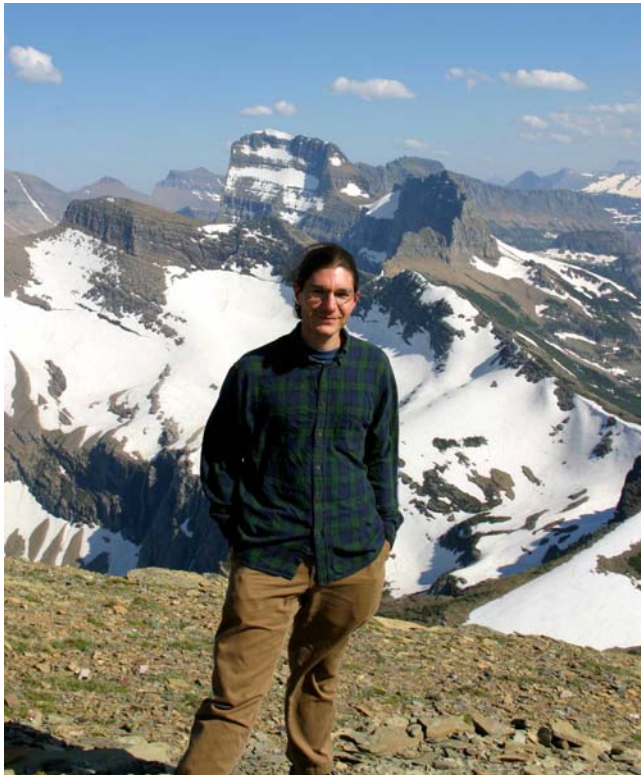
June 21, 2006 – General Meeting

RANDALL MUSEUM, 199 MUSEUM WAY, SAN FRANCISCO

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

**DR. ELIOT QUATAERT, ASSOCIATE PROFESSOR OF ASTRONOMY
UC BERKELEY**

BLACK HOLES: THE SCIENCE BEHIND THE SCIENCE FICTION



Dr. Quataert will begin by describing what black holes are (and what they are not!). He will then discuss how black holes are discovered and how they give rise to some of the most remarkable and bizarre phenomena in the universe.

Dr. Quataert is a professor in the Astronomy Department at UC Berkeley where he is a highly regarded teacher and public lecturer. He is one of the leading scientists studying how black holes are formed, the effects of black holes on their surroundings, and how black holes reveal themselves when hot gas from the neighborhood falls into them.

2005 CLUB OFFICERS & CONTACTS

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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.

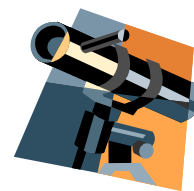
Please renew soon if your membership is expiring.

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>

CLUB TELESCOPES



The SFAA owns 6 club loaner telescopes, Dobsonian/Newtonian reflectors: 6" f/10, 8" f/7, 8.5" f/6 and 10" f/8, a Starblast and a Meade 8" SCT. 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 & Sarah Goldie, 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>

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 20th day of the month.** Send your articles to Phil Estrin at pestrin@dir.ca.gov.

THROUGH THE FINDER ...

My assertive fair weather predictions in last month's column were useless. Definitely. Our member's night on Fremont Peak succumbed to the global warming/Katrina/biblical plague/weird weather syndrome that is emerging. Rain in May, get used to it! So we'll be rescheduling our member's night on Fremont Peak for later in the summer. Between snow storms, if possible.

Each month I've been highlighting upcoming opportunities that SFAA members have for getting out under the stars but this time I feel compelled to promote some evenings under a roof. I was dismayed by how few people showed up for this past month's General Lecture. Linda Mahan has been doing such a (I'm trying to avoid the word) (but I can't) - "stellar" job lining up outstanding speaker's for us. Each month we have an opportunity to meet and hear from leading astronomers describing their most recent research. And it's free and open to the public! We're very fortunate in having so many prestigious universities and governmental agencies nearby, and so many researchers willing to report on the work they're doing.

For me, another dimension is added to my observing when I can connect the optical images I see in my scope with conceptual images in my mind's eye. Finding a faint fuzzy on the boundary of visibility, the view becomes brighter and bigger, and in sharper focus, by knowing something of the gravitational and thermonuclear events that shaped it. Over the last couple of years the monthly Lecture Series has greatly expanded my understanding of astronomy and added to my repertoire of conceptual imagery. The sensory & emotional experience of "seeing in the dark" readily intertwines with the intellectual adventure of science. We have a great resource in our monthly Lecture series. I encourage you to make fuller use of it as an SFAA member and help promote it to the general public.

So reread the front page of this newsletter, mark the date, and tell a friend!!

See you in the dark, (and indoors on the 3rd Wednesdays of the month).

John Dillon
President
San Francisco Amateur Astronomers



NEW SFAA MEMBERS

Scope City is offering to new members a \$25 credit toward the purchase of telescopes and binoculars.

Obtain a receipt for dues payment from Stephanie Ulrey, Treasurer,

treasurer@sfaa-astronomy.org.

Contact Sam Sweiss at Scope City to arrange for your discount.

IMPORTANT UPCOMING DATES

SFAA General Meetings & Lectures

Wednesday, June 21
Wednesday, July 19
Wednesday, August 16

*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)*

Board Meetings

Tuesday, June 13
Tuesday, July 11
Tuesday, August 8
7:00-8:30 p.m.

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

Mt Tam Star Parties – Special Use Permit – Members Only

Saturday, May 27 – 7:00 p.m.
Saturday, June 24, - 8:30 p.m.

City Star Parties

Saturday, June 17, 8:30 p.m. - LAND'S END - Telescope Clinic one hour before sunset
Saturday, July 16, 8:30 p.m. - RANDALL MUSEUM – Telescope clinic one hour before sunset
Saturday, August 5, 8:00 p.m. – - LAND'S END - Telescope Clinic one hour before sunset

Weather may cancel the City Star Party. Call the SFAA Hotline at (415) 289-6636 AFTER 4 PM to learn the status of the event and the location. If the hotline announces the Star Party is cancelled, the Telescope Clinic and Lecture are cancelled as well. However, if the Hotline does not cancel the Star Party, be assured that the Lecture will proceed as scheduled even given less-than-perfect telescope conditions.

Please also note that, while City Star Parties WILL ALWAYS be held on Saturdays, some will be closer to the last quarter phase of the moon, while others will be close to first quarter. This is so we can work around dates for Mt. Tam public star parties as well as our members only events on Mt. Tam.

Map and directions <http://www.sfaa-astronomy.org/sfaa/starparties/cspmap.shtml>

Upcoming General Meeting Guest Speaker

Wednesday, July 19
Dr. Franck Marchis, Assistant Research Astronomer, UC Berkeley

CROWDS AROUND ASTEROIDS

ASTRONOMY DAY REDUX



heavens and to share their enthusiasm about the wonders of our Universe. On May 5, 2006, the California Academy of Sciences presented a full day of astronomy-related events, including a talk by Jill Tarter of the SETI Institute about the ongoing search for extra-terrestrial intelligence, a presentation by science



ASTRONOMY DAY is a day for bringing astronomy to the public and gives institutions across the country the chance to host observing sessions, demonstrations, displays, and hands-on activities for the public. Professional and amateur astronomers join forces to educate visitors



historian John Dillon (who also happens to be our steadfast president!), about the first telescope ever made, and an opportunity to observe the sun. Inside, the crowds at the Academy of Sciences were light. You should have been there. Bing Quock held the raffle and two kids won most everything. Well, so did Michael Portuesi! Sam from Scope City donated many items including posters, binoculars, planespheres, books and more. John Dillon gave his scholarly discussion as well as other top-notch notable lecturers. Bing presented "Tonight's Sky," with a dazzling polished tour of the future Morrison Planetarium opening in 2008, our solar system and a few M objects easily viewed. Outside, Michael, James and I braved the elements and ventured across the street to wheedle and cajole whoever we could grab, into squinting through the eyepiece to find our closest star.



Thanks for showing up Michael and James! It wouldn't have been Astronomy Day without you.

ANNUAL SFAA NIGHT
Fremont Peak Observatory
May 19, 2006 . 7:00 p.m.



Photo star trails, courtesy of [Art Rosch](#)

*May 19 event cancelled
due to rain.
Reschedule date to be
announced.*

Are you photon deprived from the weather we're having? You may be a candidate for an evening with a very large telescope. SFAAer's can get recharged at Fremont Peak on May 19th and 20th. We have reserved the Observatory Friday evening for an exclusive private gathering of members from the SFAA, as we've done the previous years.

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 system. There are also powered observing pads outside the observatory, where visiting astronomers (like [Richard Crisp](#)) can set up to observe in Fremont Peak's dark skies.

From [March through October](#), Fremont Peak Observatory conducts programs for the public at least three Saturday evenings a month, excluding the Saturday closest to full moon. FPOA's annual StarBQ is August 26th. It'll be a blast! This is their 20th year anniversary, and the AANC will present their [annual awards](#), too.

[Fremont Peak State Park](#) is about 100 miles south of San Francisco, and 11 miles southeast 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 to pay the day fee 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.

Pat Donnelly, President of FPOA, noted that Fremont Peak, being popular as a historical stopping place, is also mentioned on page 50 of AAA's Via Magazine May/June 2005 issue! If you'd like to help in maintaining the observatory, there are work parties occasionally. If you're interested, contact Pat via: KUNGFUGINA at aol dot com.

For SFAA members wanting to enjoy this gorgeous telescope on their own, practically whenever they choose (with a few exceptions), and if you're interested in joining FPOA and becoming qualified to use the telescope, contact [Ron Dammann](#), Director of Instruments at FPOA. For more information about Fremont Peak Observatory, including excellent directions, visit their web site at <http://www.fpoa.net>

The FPOA website now has [weather cam](#) for those of you who are rightly paranoid of our unseasonable weather.



Photo of a stargazer, courtesy of [Art Rosch](#)

[Here](#) are a few pix of our day and night on the Peak last year. Looking forward to seeing you this year, Ken

2006 RIVERSIDE TELESCOPE MAKERS CONFERENCE

I hitched a ride this year to *RTMC* with Richard Ozer, his daughter and some telescope making supplies. After a sleepless train-switching blustery, windy night in Mojave (it's always windy in Mojave!), we rolled into Camp Oakes near Big Bear surprisingly refreshed. Camp Oakes is a Y camp at $116^{\circ} 45'$ west and $34^{\circ} 13'$ north at 7,250 feet, sandwiched in the San Bernardino mountains between the desert and the greater LA basin.

I went to see old and new friends, old and new telescopes and learn a few things. One innovative scope design by AANC-CON 2005 volunteer Mark Linnolt was his clear plastic ball rig. It's a floating fixed 20 incher. You collimate the beauty ingeniously at the UTA. Check out the support for the secondary; it's a shelf bracket! What a great design. I'd have put this scope in the Astronomer's Choice Award category.

I'll skip all the blather and say that I really enjoyed John Gregory's talk on his 60 years in optics.

Check out the RTMC site for the info <http://www.rtmcastronomyexpo.org/archives.html> and some of my pix <http://www.planitarium.net/sc/rtrmc2006/>



MT TAM ASTRONOMY PROGRAMS

Mt. Tamalpais State Park
MOUNTAIN THEATER

EXPLORE THE WONDERS OF THE UNIVERSE

On the Saturdays between the new and first quarter moons through September 23, we will enjoy a lecture in the Mountain Theater followed by viewing through telescopes. A complete list of the programs with dates and times can be found at the MTIA website: www.mttam.net. **Check it out and plan now to come and join us.**

We are always looking for volunteers to help our programs run smoothly. You can park cars, set out lanterns, greet the public, etc., and still enjoy the programs and the star party. But to do so, you must be a VIP (Volunteer in the Park, also Very Important Person) which means a one time, two-hour session with a park ranger. If you can help us out at any of the programs this year, please join us. Let me know by return e-mail or by calling me at 415-454-4715. If you are willing to help later in the season, we may be arranging another orientation around June or so.

I look forward to seeing you on The Mountain this year. Please share this information with anyone interested.

Tinka Ross, volunteer coordinator, Mt Tam Astronomy Programs

2006 SPEAKERS

July 1 8:30 pm	Dr. Lynn Cominsky Sonoma State University	<i>"A 'Swift' View of the Universe"</i> NASA's Swift mission studies gamma-ray bursts, the most powerful explosions in the Universe. Learn how black holes are created when stars die, and how one galactic neutron starquake changed our Earth's atmosphere.
July 29 8:30 pm	Dr. Eugene Chiang UC Berkeley	<i>"The Tenth Planet and Beyond"</i> Since 1992, astronomers have discovered over 1000 icy, rocky objects beyond Neptune, one larger than Pluto. What is known about this "Kuiper Belt" of bodies and what are the implications for the formation of our planetary system?
August 26 8:30 pm	John Dillon Randall Museum	<i>"Ancient Astronomy, the First Science"</i> The pinnacle of ancient Greek science was the amazingly sophisticated astronomy developed more than 2000 years ago at the legendary Museum of Alexandria.
September 23 8:00pm	Dr. Chris McKay NASA-Ames Research Center	<i>"Latest results from the Huygens' Mission to Titan"</i> Last year the Huygens Probe landed successfully on Titan, the largest moon of Saturn. What we saw was not what we expected. Hear the latest results from the analysis of the data from the Probe.

Know why
they're
smiling?
Come to
Yosemite
and find
out



Yosemite spaces for this event are filled. HOWEVER, if you are not signed up and would like to be placed on the wait list, let Ken know ASAP. If you are signed up and your plans change, please let Ken know IMMEDIATELY in order that he may notify a wait list hopeful of an available space. Email Ken Frank <kennethfrank@planetarium.net> with your name(s), type and size of scope(s). THANK YOU.

SFAA Yosemite Star Party at Glacier Point Friday and Saturday - July 14 and 15, 2006

The annual Yosemite star party will be held at Glacier Point, hosted by the National Park Service (NPS). Rustic camping is located at the Bridalveil Creek campground group site. There is room for several tents. Cold running water is convenient but sans showers. The camp is 8.5 miles away from Glacier Point.

For those of you unfamiliar with this event, we are given free reserved admission and camping space. In exchange, we do 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; this is a mighty good deal, considering how some folks come 12,000 miles to see these rocks. We take a maximum of 30 SFAA members. Please do not ask if your friends can come ... unless they are SFAA members. You are expected to have at least one public telescope for every two people. Check http://www.wrh.noaa.gov/total_forecast/printable_forecast.php?wfo=hnx&zone=caz096&county=cac043 for up-to-date info on Yosemite Park current weather and conditions. <http://yosemite.org/vryos/sentinelcam.htm> provides a live cam from Sentinel Dome.

You will be sent an entrance fee waiver that you will need to present to the ranger at the park entrance. You may be asked to show the ranger your telescope.

A note for non-members and those not making the list:: Yosemite is *your* national park, and you may come if you arrange your own accommodations. In this case, you would be welcome to join us at Glacier Point for the public star party and the observing afterward; however, you would not be obligated to set up for the public.

If you decide for some reason you can't come, please let Ken Frank know as soon as possible so others may fill your campsite. Those on the wait list will thank you for your consideration.

Observing site - The observing area is mostly open, with good views from about NNW to the east, around to due south. The horizon from south around to the west is partly to mostly blocked by tall trees. Still, there's a lot of open sky, and typically, the seeing and transparency are excellent. It's warm (70 to 90) during the day, and cool to chilly (40) at night, due to the elevation of 7200 feet.

Star Party - One of the rangers does a sunset talk, and then delivers the crowd to us. Following that, a member of the club will give an evening talk. Some of the public will have white flashlights, and we need to be tolerant of that. We'll have club members with red brake light tape to cover the offending flashlights. Expect lots of questions from the public. We will supply an object list with corresponding finder charts and some brief information.

Now here's the really fun part: By around 9:30 or so, we'll have the place to ourselves, and can stay until dawn. Scopes must be removed when we quit, then set up again on Saturday. Some of us may set up Sun scopes during the afternoon, show Half Dome, and invite people to come again after sunset.

Gastronomic Astronomic- Early Saturday eve is traditionally pot luck and is always fun. Please provide enough for ~ say 4 or 5. Salads, main course, pu pu's and desserts are all welcome. Let's try again for the best astronomical theme of incredible edibles. Prizes will be awarded!

Please remember this repast takes time so it's better to start our own gastronomic party early so there's no need to rush for set up Saturday evening on Glacier Point. Sunset this year will be 8:21 pm.

If you'd like to attend and are a current dues paying member, send an e-mail to kennethfrank at planetarium.net with "Yosemite Reservation" in the subject line; in the text body: your name(s), number of people, type & size of scope(s).

Ken

2006 Shingletown Star Party

June 21- 26, 2006

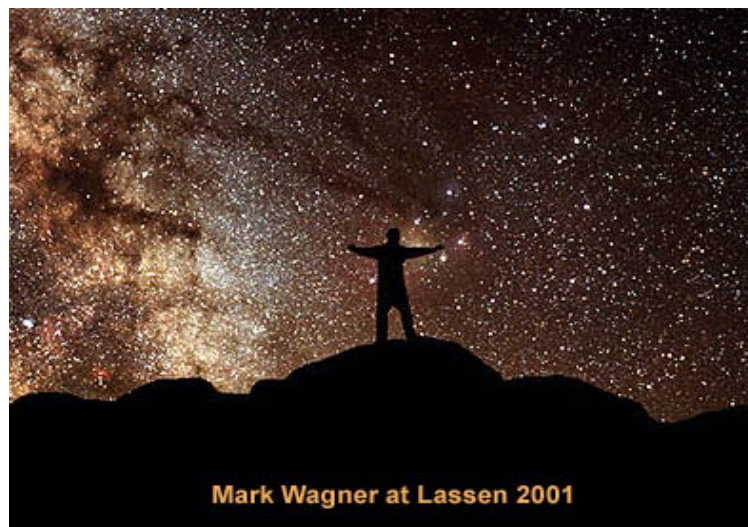
"Good friends, Dark skies"

Come join the fun under great skies!

SSP has a family atmosphere.

Amenities are minutes away in Shingletown. Excellent hiking and trout fishing in the area, and Mount Lassen Volcanic National Park is only 17 miles away!

<http://www.shingletownstarparty.org/>



Mark Wagner at Lassen 2001

ROCKY MOUNTAIN STAR STARE - June 22-25, 2006

[Registration Open Until June 18th](#)

For two decades (*it's our 20th Anniversary*), astronomers from across the U.S. and around the world have been gathering each summer in the mountains west of Colorado Springs. What draws them here each year? Dark skies. Not just dark skies, but dark skies with amazing transparency. These gazers of the stars are enjoying Rocky Mountain Star Stare!

Rocky Mountain Star Stare (RMSS) is not your typical star party. It's laid back. It's family oriented. It's in the heart of the Rocky Mountains, just 65 miles west of Colorado Springs. You don't camp on top of your neighbor. You can set up outside of your tent or RV. You have great trout fishing, turn of the century casinos, white water rafting, nature hiking, and horseback riding just a short drive away. But best of all there's a universe of stars, galaxies, nebulae, and clusters just above the horizon in every direction. Whether you are looking through a 20-inch Dob or a pair of binoculars there's more to see in a night than most people get to see in a month and some see in a lifetime.

Introduce your family to the wonders of the Colorado Rockies and the awesome spectacle of dark skies. Who knows, you might make a scientist out of one of your kids yet. And even if you don't it will be an unforgettable family experience. Join us for our 20th Anniversary celebrating the night sky.

This year's event is held from June 22nd-25th and pre-registration is currently open. Information on RMSS and online registration can be found at <http://www.rmss.org>. To speak to someone regarding RMSS, groups, or other items pertaining to RMSS, please contact Alan Gorski, Public Relations Director at csaspr@csastro.org or 719.651.8476.

Held in June in the Pike National Forest, RMSS is one of this nation's premier star parties. Average attendance is usually 350 astronomers. Take 350 astronomers, spread them around, and it doesn't take much math to figure you can camp just about anywhere you want. Even better, set up your telescope and equipment right next to your tent or RV.

[The Colorado Springs Astronomical Society](http://www.csastro.org), whose website is found at <http://www.csastro.org>, sponsors this gathering of amateur astronomers. This year's event will be held from June 22th through June 25th high up in the Colorado Rockies at over 8,800 feet! Incredible fields of stars by night are supplemented by day with workshops, children's activities, door prizes, catered meals and fun for everyone. [Click here to Register!](#)

The Colorado Springs Astronomical Society is an equal opportunity service provider and is a permittee of the Pike National Forest.



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.

Treasurer, SFAA, POB 15097, San Francisco CA 94115

make checks payable to **San Francisco Amateur Astronomers** and mail to:

- \$10 enclosed, youth/student membership
- \$25 enclosed, individual membership
- \$30 enclosed, family or foreign membership
- \$40 enclosed, institutional membership
- \$75 enclosed, supporting membership

Select one category:

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Name: Telephone:

San Francisco Amateur Astronomers Membership Application

San Francisco Amateur Astronomers
P.O. Box 15097
San Francisco, CA 94115



Information Hotline: (415) 289-6636

Web Page: www.sfaa-astronomy.org

Sharing the Wonders of the Universe

Has your membership expired? Your mailing label includes the month and year through which your membership is paid. If it is past, your membership has expired and this may be your last issue.