

★ ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 54, No. 5 – MAY 2006

May 17, 2006 – General Meeting

RANDALL MUSEUM, 199 MUSEUM WAY, SAN FRANCISCO

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

**R. L. MANCINELLI, Senior Research Scientist
SETI / NASA Ames Research Center**

EVOLUTION OF HALOPHILES: A TERRESTRIAL ANALOG FOR LIFE IN BRINES ON MARS



Halophiles are salt "loving" organisms that inhabit environments with salt concentrations ranging from 15% to saturation. Representatives of halophiles occur in the Archaea, Bacteria and Eucarya. Adaptation to high salt can be achieved by the accumulation of organic osmotic solutes without the need for adaptation of the intracellular proteins. This mechanism is found in all three domains of life. The second mechanism is the intracellular accumulation of high concentrations of KCl, requiring adaptation of intracellular physiology to function in the presence of high ionic concentrations. This mechanism is found in the Archaea and in the Bacteria. The phylogenetic and physiological diversity among the halophiles suggests that halophily may have arisen more than once during evolution and is not a rarity. Because data from Mars missions suggest that Mars almost certainly had abundant liquid water on its surface at some time in the past. It could have harbored some form of life in its past. As Mars lost its atmosphere it not only became cold but also dry due to water

evaporation. As the water evaporated the dissolved minerals became more concentrated forming salty brine pockets. Because data from earth suggests that it may be relatively easy for halophilic type organisms to evolve if there were any life on Mars in water there should have been some type of osmophile, or halophile. Brine pockets containing high concentrations of dissolved salts would have selected for the survival of halophiles. These brine pockets may either be an "oasis" for an extant Martian biota, or the last refuge of an extinct Martian biota. Eventually near surface brine pockets would have dried to form evaporites. Evaporites are deposits that result from the evaporation of water containing salts, on earth consisting primarily of halite (NaCl) gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) or anhydrite (CaSO_4). Evaporites containing bacterial and algal assemblages exist on earth today and are well-known in the fossil record. Data regarding the survival of halophiles in permafrost, in evaporites and freeze thaw cycles suggest that these types of organisms may serve as a terrestrial analog to the last vestiges of life on Mars.

Rocco L. Mancinelli, is a Senior Research Scientist with the SETI Institute. He received his Ph.D. in Microbial Ecology from the University of Colorado –Boulder. While there he studied the microbial ecology of the Alpine Tundra with an emphasis on nitrogen cycling. Prior to working for the SETI Institute Dr. Mancinelli held a National Research Council National Academy of Sciences Fellowship at NASA Ames Research Center where he first worked with halophiles and proved halophiles could respire nitrate in addition to oxygen. Prior to that he was an Assistant Professor of Biology at Washburn University, Topeka, Kansas. Dr. Mancinelli's research encompasses ecology, physiology, and biogeochemistry. This broad research program has led him to conduct field studies in a variety of different environments ranging from the Antarctic and Alpine tundra to the marine intertidal and the hot springs of Yellowstone National Park, Wyoming, to the hot Chilean Atacama desert. He also conducts research projects that involve examining the physiology and ecology of microbes inhabiting naturally occurring gypsum-halite crusts. He has and is involved in several space flight experiments exposing microbes to the space environment and attempting to understand how they survive.

2005 CLUB OFFICERS & CONTACTS

<i>President</i>	John Dillon	(415) 332-8096
<i>Vice President</i>	Kenneth Frank	
<i>Secretary</i>	Jennifer Myers	(415) 386-7576 jenfrey@earthlink.net
<i>Treasurer</i>	Stefanie Ulrey	
<i>Speaker Chair</i>	Linda Mahan	
<i>City Star Party</i>	Randy Taylor	(415) 255-8670 randytaylor3@aol.com
<i>Membership & Subscriptions Bulletin</i>	Stefanie Ulrey	sulrey1680@aol.com
<i>Editor-in-Chief</i>	Phil Estrin	(510) 622-2428
<i>Associate Editor</i>	Annette Gabrielli	(415) 703-4539 agabrielli-sfaa@sbcglobal.net
<i>Telescope Loans</i>	Pete Goldie	(415) 206-9867
<i>Honorary Director</i>	John Dobson	
<i>Board Members</i>	Russell Cashin	(415) 823-7545
	Peter Schumacher	
	Jorge Morales	(510) 337-1446
	Karim Mokhtar	
	Robert English	(415) 383-6475 sfaa@bogusnet.net
	Elan Morpurgo	
<i>Board Member</i>	Michael Portuesi	(415) 550-9366
<i>Emeritus</i>	John Dobson	
<i>Alt. Board Members</i>	Don Charles	(415) 897-6554
	Dirk Lammerts	(415) 242-1464
<i>Webmaster</i>	Joe Amato	

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.

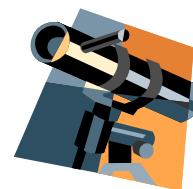
ONLINE SERVICES FOR SFAA MEMBERS



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 ...

It's been a frustrating winter for Bay Area observers but the rainy season is finally coming to an end. Definitely. I think. As I write this the clouds are thick and threatening but the calendar says clear skies are due. So, here is a lineup of some great observing opportunities. The public lecture/star party season is about to begin on Mt. Tam and SFAA's monthly members-only Tam nights enter their clear sky phase. Definitely. BUT - our special access to the mountain top requires that we take responsibility for gate security. For that, we need volunteers who have had a short training class with the Mt. Tam Rangers. No volunteers, no access! The next opportunity to be "certified" for star party gate duty is June 3 at the Pantoll Ranger Station, 9 – 12 am. If you can attend please call Tinka Ross at 454-4715. The list of volunteers for the upcoming season is very thin and we need new recruits.

Our annual Fremont Peak weekend is May 19/20. Here's a chance to observe through a 30 inch photon bucket from one of the darkest sites in the Bay Area. Ken Frank (kennethfrank@planitarium.net) is coordinating the weekend and needs to submit names and car license #s before hand. Make sure you let him know if you're planning to attend. Ken's also the person to notify if you want to join us at Yosemite's Glacier Point in July (14th & 15th). This is one of the most sublime observation sites anywhere and space is limited. Want to fill up your travel calendar even more? There's the week of June 18 – 24 when you can choose between star parties at Grand Canyon or up at Shingletown, at the foot of Mt. Lassen. For these you need to register on line, and soon.

May 6 is national "Astronomy Day". Daylight activities at the California Academy of Sciences, 450 Harrison St. will include astronomy talks, sidewalk sun scopes, and hands-on family activities. For an "Astronomy Night", bring a scope and family &/or friends to the Randall Museum. I'll do a slide talk at 6:30 on "Searching for the first Telescope" and then when (urban) darkness descends we'll share our scopes with the public. Should be some great views of Jupiter. Definitely.

See you in the dark,

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, May 17

Wednesday, June 21

Wednesday, July 19

*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, May 9

Tuesday, June 13

Tuesday, July 11

7:00-8:30 p.m.

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

Special Events

Saturday, May 6 – 10:30 a.m. – ASTRONOMY DAY AT CAL ACADEMY

7:00 p.m. – ASTRONOMY NIGHT AT THE RANDALL MUSEUM

May 19 – 7:00 p.m. – FPOA NIGHT – FREMONT PEAK – MEMBERS ONLY

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, May 6, 7:00 p.m. - ASTRONOMY NIGHT AT THE RANDALL MUSEUM

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

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 Speakers

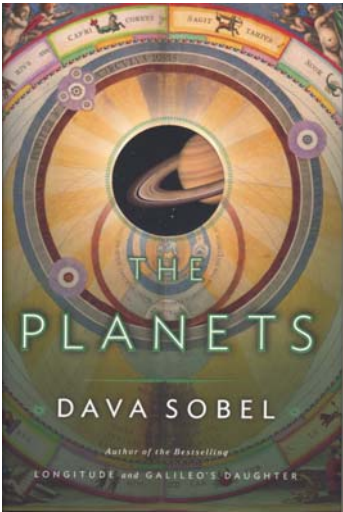
Wednesday, June 21

Dr. Elliot Quataert, Associate Professor of Astronomy, UC Berkeley

Black Holes: The Science Behind the Science Fiction

Book Review: *The Planets*, by Dava Sobel

Michael Portuesi



The recent spate of springtime rain has sent me dipping into my reading pile. Dava Sobel is an excellent popular science historian, and I've enjoyed her earlier books *Longitude* and *Galileo's Daughter*. On that note, I was looking forward to reading her newest book, *The Planets*.

The Planets is a fairly short book, taking us on a tour of the planets chapter by chapter. Sobel attempts to present not only science, but some cultural and historical background behind each of the Solar System's inhabitants. The feel is not that of a straight science book; instead it's more of a collection of essays devoted to each planet.

Sobel has sought novel angles in her attempt at planetary storytelling. The chapter on Mars is written in first-person, from the point of view of a Mars meteorite that may hold ancient Martian life. The combined chapter on Uranus and Neptune takes the form of a fictitious letter written by Caroline Herschel in England to Maria Mitchell, a contemporary female astronomer in the United States.

But despite these attempts at keeping the book wide-ranging and interesting, for me it was a huge disappointment. By far, this is the fluffiest astronomy book for adults I have read in the past few years. The book isn't very long, so it has little space to devote towards each subject. Consequently, the science content feels like a basic summary of facts, with little depth. Anybody who has kept up with the science articles on the planets in *Sky and Telescope* or *Astronomy* magazine will find very little in the way of stimulating material here.

The inclusion of include historical and cultural material helps to make things a little more interesting for those of us already familiar with the science. But again, the history and culture are glossed over, with no real "meat" to sink our gray matter into.

I have a few issues with the presentation as well. The chapter on Jupiter contained an essay on astrology. It presented plenty of astrological information with no disclaimer that astrology itself is a pseudo-science, whose only real significance in world history is to spawn the true science of astronomy. A casual reader could be led into believing that Dava Sobel is seriously promoting astrology.

Similarly, Sobel's imaginary "Caroline Herschel" letter bears no disclaimer to its being fictitious. We can only conclude it is fabricated due to its heavily contrived nature. That's not a good way to get your story across.

In summary, I forced myself to finish reading this book only so I could write this review. If you want to learn about the Solar System, there are plenty of good books much more deserving of your time and dollars than this one.

SATURDAY, MAY 6

CELEBRATE ASTRONOMY DAY AT THE CALIFORNIA ACADEMY OF SCIENCES

MEET SCIENTISTS FROM NASA, SETI, AND MORE

It's the oldest science in human history, and on Saturday, May 6, visitors at the California Academy of Sciences can explore the latest breakthroughs and techniques during ASTRONOMY DAY 2006. Begun in 1973 by local astronomer, Doug Berger, ASTRONOMY DAY 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 about the heavens and to share their enthusiasm about the wonders of our Universe.

The California Academy of Sciences will present 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 historian, John Dillon, about the first telescope ever made, and the chance to observe the sun safely if weather permits. In addition, members of the San Francisco Amateur Astronomers, the Astronomical Society of the Pacific, and NASA will be available for questions and hands-on activities. And be sure to enter a raffle for various astronomy-related goods, or pick up free materials courtesy of *Astronomy* magazine. All programs are free with museum admission.

For those who can't wait for ASTRONOMY DAY, visit www.calacademy.org/planetarium to download *Sky Tour*, a free audio tour of the night sky presented by the California Academy of Sciences and the Environmental News Network; or sign up for a stargazing session at the San Francisco Botanical Garden this spring:

THE HISTORY OF ASTRONOMY DAY



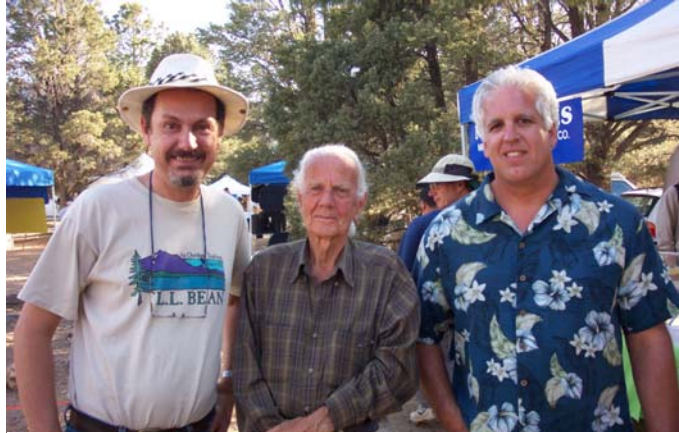
Astronomy Day Founder
Doug Berger

Astronomy Day is a day for bringing astronomy to the public. It was April 7, 1973 that the first Astronomy Day was held. Suggested by then AANC President Doug Berger (still a member of the Eastbay Astronomical Society), at an AANC Board meeting held at Chabot Observatory, Astronomy Day is now celebrated across our globe. The concept of Astronomy Day first occurred to Doug Berger back in the Fall of '72 during a drive to attend a meeting of the Sacramento Valley Astronomical Society. He and Frank Miller, then President of the AANC, were visiting the Sacramento group to tell them about the AANC and invite their participation in the Association. As a member of the San Francisco Sidewalk Astronomers, Doug spent a good deal of time with John Dobson, Brian Rhodes, and others regularly doing public viewing at various locations including 9th and Irving, Ghirardelli Square, and the Yosemite and Death Valley National Parks.

Promoting amateur astronomy was a big part of Doug's life, and something he thought about, a lot. In his mind it was only natural to link sidewalk astronomy with the organizational functions of the AANC. Add in a bit of media coverage to get the idea out to the public, make it a once-a-year event, and give it a snappy name—something like Astronomy Day! Frank Miller and the rest of the AANC were very supportive, and everyone worked together to organize the first Astronomy Day. There were 27 observing stations set up around Northern California and Nevada.

At the August 1977 NAA (National Amateur Astronomers) meeting in Denver, Colorado, Doug presented a paper on Astronomy Day, which was very well received by the audience, who then went back to their various clubs to "spread the word." Doug's friend, Joe Liu from Hong Kong, disseminated the idea to all parts of the globe.

Beside the work of all the people in the various clubs, the media has been a big asset in popularizing Astronomy Day. In addition to Sky and Telescope, Astronomy Magazine has also gotten into it big time. Contests have been held as to who has the best event. Even Buzz Aldrin has joined with Meade Instruments to promote Astronomy Day by giving away an autographed telescope. As Astronomy Day continues to grow over the years the national effort is coordinated by Gary Tomlinson of the Astronomical League. Politicians from local mayors to state governors have proclaimed Astronomy Day in their area. No national proclamations for Astronomy Day have as yet been made, but this is probably just a matter of time. Doug retired to Bend, Oregon in July of last year.



Doug Berger (left) and Tom Matthews (right) with John Dobson

Ken Frank met Doug Berger and Tom Mathews (fellow SFSAer's) at the 2005 Riverside Telescope Makers Conference with John Dobson.

Thanks to Don Saito for his article in the EAS Reflector.

FRIDAY . MAY 26 . 8:30 - 10 PM
STARGAZING WITH ACADEMY ASTRONOMER BING QUOCK
SAN FRANCISCO BOTANICAL GARDEN, GOLDEN GATE PARK

Join Bing Quock of the California Academy of Sciences' Morrison Planetarium for night-sky viewing sessions on the beautiful grounds of the San Francisco Botanical Garden in Golden Gate Park, including a laser-guided tour of the heavens and a deeper exploration with binoculars and a telescope. Dress warmly, bring a quality pair of binoculars (if you have them), a red-colored flashlight to preserve your night-vision, and your curiosity about the night sky! Class is cancelled in the event of cloudy weather. Classes cost \$12 per person or \$18 per family (\$8 per person or \$13 per family for Academy members). For more information, call (415) 661-1316 x354.

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



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

If anyone hasn't already verified their attendance by e-mailing Ken Frank and including car license plate numbers, please do so by Thursday, May 11, at <kennethfrank@planitarium.net>.

THANK YOU

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.

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



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

Ken

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

June 3 8:30pm	Seth Shostak SETI Institute	<i>"The Latest Skinny on SETI"</i> Despite more than four decades of searching, astronomers have heard nothing. Is this a quixotic mission, or could there soon be proof that someone is out there? What are the latest efforts to find someone in space who's at least as clever as you are?
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



SFAA Yosemite Star Party at Glacier Point Friday - July 14 and Saturday - July 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.

*Sign ups for Yosemite are filling.
If you haven't signed up yet, now's the time.
Email Ken Frank <kennethfrank@planitarium.net> with your name(s),
type and size of scope(s).*

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

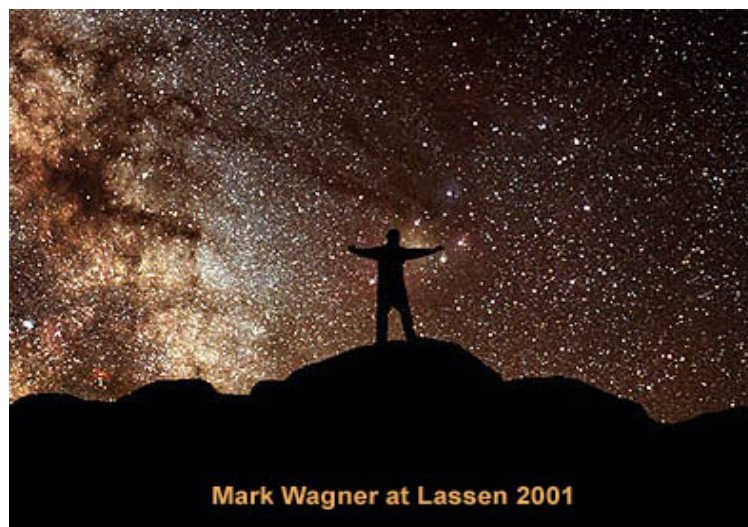
"Good friends, Dark skies"

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

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:

Email address:

Address:

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.