

★ ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

Vol. 56, No. 7 - July 2008

Wednesday, August 20, 2008 – General Meeting

Randall Museum . 199 Museum Way . San Francisco

7:00 pm Doors Open . 7:30 pm Announcements . 8:00 pm Speaker

LYNDA WILLIAMS, Physics Instructor, SRJC **Space Ecology: The Final Frontier of Environmentalism**



Fifty years after Sputnik launched the space age, humans are turning space into yet another junk yard, with millions of pieces of man-made debris orbiting the Earth, putting targets both in space and on the ground at risk. One year after China blew up its own satellite on orbit, the US shot down a defunct satellite in space. The world is coming to grips with the urgent need to establish international 'rules of the road' for space debris regulation and mitigation in order to prevent an environmental catastrophe in space or on Earth. Lynda will survey the current situation and speculate on possible future space debris scenarios created by the deployment of space-based weapons, ASATs, the private space industry and geo-engineering solutions to climate change. What the world needs now, before it is too late, is an environmental movement in heaven: Space Ecology.

By day, Lynda Williams is a physics instructor at Santa Rosa Junior College in California, and by night, she performs original science musicals for both scientists and the general public. KC Cole of the LA Times wrote of Lynda: "Every scientist dreams of seducing people with the beauty and wonder of the natural world. But few take it as far as Lynda Williams--the Physics Chanteuse--who puts her microphone where her mouth is." Lynda has been a space enthusiast and amateur astronomer since getting a Newtonian telescope at the age 12. She has a BA in Math and a MS in Physics, and her areas of interest are cosmology, space, environmentalism, social justice, peace, love, art and entertainment. Lynda has produced and performed planetarium shows at both SRJC and SF State and has been active in space issues related to ecology and peace for many years. For more information check out Lynda's websites: www.scientainment.com & www.space-ecology.com

2008 CLUB OFFICERS & CONTACTS

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CLUB TELESCOPES

The SFAA owns eight very fine, easy to use, loaner telescopes well-suited for deep sky, planets, and star parties. All scopes are available to any SFAA member. The loaner custodians for the majority of our fleet are Pete & Sarah Goldie. Please contact them at telescopes@sfaa-astronomy.org for details if you are interested in borrowing a scope or if you have items you can donate for the loaner program (eyepieces, star maps/books, red flashlights, collimator, etc.). Please contact the appropriate member indicated below if you are interested in borrowing one of the telescopes.



- 1) 6" f/10.3 Dobsonian/Ken Frank ken@sfaa-astronomy.org
- 2) 8" f/7 Dobsonian/Pete Goldie
- 3) 8.5" f/6 Dobsonian/Pete Goldie
- 4) 10" f/8 Dobsonian/Pete Goldie
- 5) 114mm f/4 Newtonian StarBlast/Pete Goldie
- 6) 8" f/10 Celestron SCT/Annette Gabrielli/ annette@sfaa-astronomy.org
- 7) 8" f/10 Meade SCT/Stefanie Ulrey/treasurer@sfaa-astronomy.org
- 8) 9.5" f/5.6 Celestron Newtonian/Ken Frank/ ken@sfaa-astronomy.org

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. For information on the course tapes themselves:



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

MEMBERSHIP DUES

Membership is billed for each upcoming year on June 30. Members may receive no more than one bulletin after the expiration of membership.

SFAA Website and Online Services



The SFAA web site at sfaa-astronomy.org is provided to our members and the general public for the sharing of club information and services. The web site contains links for club [star parties](#), [events](#), [newsletters](#), [lectures](#) and [meetings](#). If you wish to interact with other people who are interested in astronomy, the SFAA web site offers public and members only [bulletin board forums](#). If you wish to remain up-to-date on club activities, then we encourage you to subscribe to one or both of our public [mailing lists](#), which will allow you to receive our newsletter and/or club announcements via email. Other useful and interesting information and services are available on the site such as [observing location reviews](#), [member astronomy photos](#), and [members only telescope loans](#). Information about SFAA's membership, organization and by-laws are available at the club's online public document [archive](#). If you need to contact a representative of the SFAA, then please visit our [contacts](#) page to help in finding the right person to answer your questions.

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 Editor@sfaa-astronomy.org.

PRESIDENT'S COLUMN

Last month we went to Yosemite for our annual star party at Glacier Point. Fifteen tents became our home for the weekend at Bridalveil Campground.



Morning coffee at Bridalveil Campground

The star party was held at Glacier Point, eight miles from the campground, on Saturday and Sunday night.



SFAA at Glacier Point

Seeing conditions were just ok with quite a bit of cloud cover for part of the night and with the three quarter Moon wiping out most of the Southern horizon. We nevertheless had a good showing from the general public and spent the earlier part of the evening looking at the Moon and Jupiter and later moved to some M objects. But just setting up the telescope surrounded by the majestic beauty of the valley was simply breathtaking. When I arrived at Glacier Point shortly before sunset on Sunday, the entire mountain chain across was covered in golden

light. Unfortunately, I was too busy setting up my new mount to even think about taking a photo.

I would like to highlight two major upcoming events: the first is the solar eclipse during the night (sic! – as the eclipse is happening during day time in China) from July 31st to August 1st. The other event is the Grand Opening of the California Academy of Sciences on September 27-28.

Let's start with the eclipse: you don't have to make last minute travel arrangements for China. The Exploratorium in San Francisco is hosting an eclipse night including a live satellite webcast from Xinjiang Uygur near the Mongolian border. The event starts at 9pm on Thursday and lasts until 6am on Friday. A lot of great educational and entertaining activities will go on throughout the night. The SFAA will also participate in the program. Please check the Exploratorium website (exploratorium.edu/eclipse/2008/programs.html) for details including ticket and admission info.

The second event is the Opening Weekend of the new Academy of Sciences building and exhibits. The Academy promises to become a terrific venue for all things related to Earth and space sciences. And the opening weekend will be a major event in San Francisco and beyond with more than 50,000 visitors expected on that weekend alone. You can get a sneak preview of things to come at the Academy website (calacademy.org/index.php). This is one of the biggest opportunities to showcase the SFAA, and we are in the middle of planning some great activities that the SFAA will sponsor during that weekend. We have some exciting ideas including solar observing, a mirror-grinding demonstration, and presentations on how the solar system and the rest of the universe work. But the program has not yet been finalized and we could use additional ideas and volunteers. Please contact me at president@sfaa-astronomy.org to learn more about the event and to sign up for our activities.

DIRK LAMMERTS
PRESIDENT

Opening Weekend at the California Academy of Sciences



On the weekend of September 27-28, the California Academy of Sciences will reopen its doors to the public for the first time. Join the Academy for a weekend-long celebration of historic proportions in San Francisco's Golden Gate Park - with family-friendly activities, delicious food, and entertainment all day long. The festivities on Saturday will begin at 8:30 AM, when Architect Renzo Piano, Executive Director Greg Farrington, Mayor Gavin Newsom and other officials commemorate the completion of the new Academy with an opening ceremony. For updates and details, visit www.calacademy.org

CALL FOR VOLUNTEERS - You Can Be a Part of the Historic Reopening of the Academy and the Morrison Planetarium!

The SFAA is supporting the opening with astronomical activities throughout the weekend. We will have our own booth and we need your help!!! Please sign up for one or more time slots listed below to help conduct our activities. Please note that the afternoon and evening slots on Saturday overlap with our annual picnic and Mt. Tam SUP star party – sign up for times after 3pm on Saturday only if you know for sure that you will not attend the picnic or star party.

Here are some activities to choose from: solar observing, telescope demonstration, SFAA brochure hand out, planet and galaxy distance demonstration, and general astronomy information. But you can also add more to the list if you want to organize your own activity.

This is your chance to represent the club you love. And this will be the biggest and most prominent event that the SFAA is participating in this year. Over 50,000 visitors are expected to attend the opening event! This is an excellent time for us to reconnect with the Academy and show our support. Demonstrate that by volunteering. We can only make this a success with your help.

Please send an email to academyevent@sfaa-astronomy.org and indicate the time slots (more than one will get you extra credit) and the activities you would like to support or organize. Time slots are:

Saturday	8:30am-11am	11am-1pm	1pm-3pm	3pm-5pm	5pm-7pm	7pm-9pm
Sunday	8:30am-11am	11am-1pm	1pm-3pm	3pm-5pm		

Thank you for your support!
Dirk Lammerts



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



July 25, 2008

California Academy of Sciences Public Opening Weekend Vendor Proposal

The San Francisco Amateur Astronomers (SFAA) would like apply for space to do astronomy public outreach during the Opening Weekend of the California Academy of Sciences on Saturday 9/27/08 and Sunday 9/28/08.

Founded in September 1952, the San Francisco Amateur Astronomers is an association of people who share a common interest in astronomy and related sciences. The SFAA conducts monthly star parties on Mount Tamalpais and in the city of San Francisco, organizes a public lecture series featuring high-caliber local astronomers and scientific researchers, and participates in educational and outreach events. Our membership consists of people from all walks of life, educational backgrounds and ages.

During the Opening Weekend, we will provide opportunities for solar observing during the day and potentially night sky observing after sunset on Saturday (see comment below), hands-on activities for children, demonstrations for the whole family, and information about local astronomy resources. We are also planning to conduct one or more demonstrations on how to grind a mirror for an amateur telescope. Membership information will be available for interested visitors. The activities will be organized and conducted by members of the SFAA. Please note that the SFAA is holding its monthly star party on Mt. Tam on Saturday, September 27th. Depending on the availability of volunteers, we might or might not be able to provide activities for the Opening Weekend on Saturday late afternoon and evening, but we would certainly be able to organize activities on Saturday morning, Saturday early afternoon, and on Sunday. We would also obviously only be able to offer night sky observing on Saturday if the activities in the vendor area continued beyond sunset (around 7pm).

We would like a table to conduct these activities and would need some open space adjacent to the table for setting up one or two telescopes, but we don't need a power supply. We would like to put a sign up on the front of the table indicating that we are the SFAA. We have proof of current liability insurance available upon request. You can reach us via email at president@sfaa-astronomy.org

We very much look forward to participating in the Opening Weekend program.

Dirk Lammerts
President, SFAA

Come Join the SFAA and SCAS in a Joint Event: The First Mini-Messier-Marathon



The San Francisco Amateur Astronomers and the Sonoma County Astronomical Society will co-host a Mini-Messier-Marathon at Lone Rock Flat, Lake Sonoma, on Friday, August 29th 7:47 p.m.

Directions:

Take 101 N to Geyserville (about 20min north of Santa Rosa), take the Canyon Rd exit and turn left (go under the freeway). Take Canyon Road until it ends at a T with Dry Creek Road.

Turn right onto Dry Creek Road and continue until it reaches the Lake Sonoma Recreation Area.

Make a sharp left turn, over the spillway bridge, at the enter the park. Drive through the lower park area, and continue up the hill past the Skaggs Spring turn off, onto Rockpile Road. Follow Rockpile Road, over the bridge across the

lake, and up the hill. Look for Grey Pine Flat turnout, on the right, (the alternate observing site). Continue up to Lone Rock Flat about 1mi further on the right. Lone Rock is the preferred site, as it has better elevation and horizons.

Radar link:

<http://radar.weather.gov/radar.php?rid=dax&product=N0R&overlay=11101111&loop=no>

Lake Sonoma is an Army Corps of Engineers facility:

<http://www.spn.usace.army.mil/lakesonoma/index.htm>

Barcroft White Mountain Research Station Courtesy of the East Bay Astronomical Society (EAS)

Barcroft White Mountain Research Station is a multicampus research unit of the University of California Office of Research, with a campus office located at UC San Diego. WMRS includes a base station near the town of Bishop (Owens Valley Lab; elevation 4000'/1220m), a montane station at Crooked Creek (elev. 10,200'/3110m), an alpine station at Barcroft (elev. 12,470'/3800m), and a high alpine summit lab on White Mountain Peak (elev. 14,250'/4340m). The combination of facilities, geologic exposure, steep topography, high elevation and winter access make the station uniquely valuable for scientific study and education. This unique opportunity is not to be missed. Contact Dave Rodrigues of the EAS: DaveVRod at aol.com for reservations and fee. <http://www.wmrs.edu/>

IMPORTANT DATES

SFAA GENERAL MEETINGS & LECTURES

Wednesdays
August 20
September 17

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

Tuesdays
July 8

August 12
September 9

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

Special Use Permit observing nights on Mount Tamalpais are private and open *only* to SFAA members. Please arrive by sunset (times listed below). A permit is required for each car. We must vacate the mountain by 2:00 a.m. except on specially approved nights (such as Messier Marathon).

SATURDAYS

July 5 – 8:35 p.m.
August 2 – 8:17 p.m. **GATEKEEPERS NEEDED**
August 30 – 7:41 p.m. **GATEKEEPERS NEEDED**

CITY STAR PARTIES - TELESCOPE CLINIC ONE HOUR BEFORE SUNSET

Saturday, July 26, 8:23 p.m. at Land's End (Point Lobos)
Saturday, August 23, 7:51 p.m. at Land's End (Point Lobos)
Saturday, September 20, 7:09 p.m. at Randall Museum

Weather may cancel the City Star Party.

Please 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 – Land's End (Pt. Lobos) <http://www.sfaa-astronomy.org/clubarchive/directions-pointlobos.php>

MT TAM PUBLIC STAR PARTIES

VOLUNTEER GATEKEEPERS ARE ALWAYS NEEDED

Public nights on Mount Tamalpais start with a lecture in the Mountain Theatre, followed by public viewing in the Rock Springs parking lot. SFAA members may view privately after crowd departs, approx. 11 pm-2 am. For more information go here: <http://www.sfaa-astronomy.org/starparties/>

July 12 – 8:32 p.m.
August 9 – 8:09 p.m.
September 6 – 7:31 p.m.

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

Vivian White, Treasurer,

treasurer@sfaa-astronomy.org.

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


THE LARGEST AND MOST COMPLETE
OPTICAL CENTERS IN THE WORLD

2008 San Francisco Amateur Astronomers Lecture Series

Free & Open to the Public sfaa-astronomy.org

7:30pm.

Randall Museum - Randall Museum Theater, 199 Museum Way, San Francisco . randallmuseum.org

UPCOMING LECTURES

August 20th - Lynda Williams, Santa Rosa Junior College - "Space Ecology: The Final Frontier of Environmentalism"

Lynda will survey the current space debris situation and speculate on possible future scenarios created by the deployment of space-based weapons, the private space industry and geo-engineering solutions to climate change. As Lynda likes to say: What the world needs now, before it is too late, is an environmental movement in heaven: Space Ecology.

September 17th - Dana Bachman, SOFIA, NASA Ames - "SOFIA : NASA's Stratospheric Observatory for Infrared Astronomy"

SOFIA , a 2.5-meter (100-inch) telescope mounted in a modified 747SP aircraft, is expected to begin scientific observations in spring 2009. Flying above more than 99% of Earth's atmospheric water vapor, SOFIA will have nearly the same access as a space telescope to far-infrared and sub-millimeter radiation from celestial sources. The talk will cover development and testing of SOFIA as well as prospects for some of the exciting scientific observations that SOFIA will make possible.

October 15th - To be announced

November 19th - Jeff Cuzzi, NASA Ames - "What Have We Learned from the Cassini/Huygens Mission to Saturn"

In this talk, Jeff Cuzzi will review the key science highlights so far on the giant planet Saturn, its spectacular rings, its small but very diverse icy moons, and its planet-sized moon, Titan.

December 17th - Member's Night

Our December meeting features presentations from our SFAA members, plus the annual contests from our members of entries of astronomy art, astrophotography and astronomy literary works. Elections of our volunteers for Officers and Board Members are held on this festive evening.

NASA - What's Up

Summer is here so it's the perfect season to talk about the Sun. Although this "What's Up" is designed for June, it's still an excellent video. What's Up from Jane Houston Jones:

<http://www.jpl.nasa.gov/videos/whatsup/whatsup20080630/>

Heads Up on Air Quality for Viewing the Night Sky

Many of us will be taking off for star parties this weekend. To help alleviate questions of air quality, see for yourself the NPS Air Quality Web Cams to help you judge visibility and more:

<http://www.nature.nps.gov/air/webcams/>

Best Of

2008 BEST OF SAN FRANCISCO

BEST LOCAL NERDS

SAN FRANCISCO AMATEUR ASTRONOMERS

<http://sfweekly.com/bestof/2008/award/best-local-nerds-1033080/>

The San Francisco Amateur Astronomers is one of those societies that truly make learning enjoyable. Its name might summon images of Trekkies at a sci-fi convention, but club members are supernice and hail from all kinds of professional backgrounds. You've likely seen them cavorting around the city when something cosmological is about to occur — you can simply identify them by their enormous painted telescopes, which are sometimes handmade but always effective. Best of all, they're so darned accessible and informative that it's fun to stop and gab with them about Leonid meteor showers or just life in general. If you're interested in, you can always sign up and revel in the society's myriad star parties and field trips to dark sites in Northern California (which is definitely a big deal, considering all the light

pollution that has mucked up the skies for modern-day Galileos). They also hold their annual Astrophotography, Literary and Art Awards, an event that's invariably kooky and ethereal, a bit like fun with presentations on stuff like solar eclipses and black holes, so you can live out all your vicarious Stephen Hawking fantasies.

2008-2009 MEMBERSHIP DUES

SFAA membership now comes due in June. Before now, dues were payable in the month a member first joined. Last year, the SFAA board voted to make everyone's dues payable at the same time - in June of each year. This was done for two reasons: 1) to save a great deal of work for our volunteer Treasurer, present and future, and, 2) for the convenience of members - it's easier to remember! In the past, many members forgot their due date and their membership unintentionally lapsed.

N.B. for those of you who have a club discounted *Sky and Telescope* magazine subscription, you will need to renew your subscription separately. The magazine will send you a renewal notice. In the past, you had to send that renewal notice with payment to the SFAA; now you can mail your *Sky and Telescope* subscription renewal payment directly to *Sky and Telescope*. **Note: Not renewing your club membership on time may mean your magazine subscription(s) will also terminate.**

Thanks for bearing with us during this transition process -- it'll all seem worth it next year! Just complete the membership form on the last page of the newsletter and submit with your renewal check to:

San Francisco Amateur Astronomers
P.O. Box 15097
San Francisco, CA 94108

YEARLY RATES FOR MEMBERSHIP

\$10 – Youth (under 18) Student Membership	\$25 – Individual Membership
\$30 – Family or Foreign Membership	\$40 – Institutional Membership
\$75 – Supporting Membership	

MEMBER BENEFITS INCLUDE

- Subscribing to our Announcements mailing list to receive newsletter, activity and event announcements.
- Interaction with world class speakers as they present cutting edge astronomical research
- Discounts on [Sky & Telescope](#) and [Astronomy](#) magazines*
- Discounts on equipment and accessories at [local telescope retailers](#)
- Annual club Astrophotography, Literary & Art Awards
- Social events, such as our annual picnic and our awards dinner
- Club telescopes – use one of the club's loaner scopes on a month-to-month basis
- Yosemite Star Party – held at Glacier Point exclusively for SFAA members
- Access to events and resources in Northern California and beyond
- Field trips – to observatories and other locations of scientific interest, such as Mt. Wilson Observatory in Pasadena, Chabot Space and Science Center, Fremont Peak, and the Stanford Linear Accelerator Center
- Extended observing hours at the Mount Tamalpais Astronomy Program
- Access to dark sites in Northern California

San Francisco Amateur Astronomers
POB 15097
San Francisco CA 94115

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

_____ E-Mail
_____ Hard Copy

You can choose E-Mail (Recommended) or hard copy delivery for Above the Fog (Check one)

Information: Name(s) _____
Address _____
City _____
State _____
Home Phone _____
E-Mail _____
Zip _____

Membership Categories (Check one): _____
\$10 Youth/Student _____
\$25 Individual _____
\$30 Family _____
\$40 Institutional _____
\$75 Supporting _____

Members pay one half the amount listed below
Membership is billed for each upcoming year on June 30. Between January 1 and June 30, new

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.