



VOL. 50, No. 9 – September 2002

**The 50th Anniversary Speakers Series
Women In Astronomy**

"Return to the Red Planet: A New Era of Mars Exploration"

Dr. Virginia C. Gulick
NASA/Ames Research Center, Space Sciences Division
September 18, 2002

Dr. Virginia Gulick, a research scientist at NASA's Ames Research Center at Moffett Field, is employed by the SETI Institute. Her research interests focus on understanding the role water has played in shaping the surfaces of Earth and Mars and its implications for climate change. She is a member of the Mars Landing Site Steering Group, a group that is charged with helping to select the locations for the next two robotic rovers to explore the surface of Mars. She is also a team member on the high resolution camera that will fly on next Mars orbiter mission. The camera will be able to image beach ball-sized features on the surface of Mars when it arrives at the planet in 2006.

Dr. Gulick received her undergraduate degree in geosciences from Rutgers University and her Master's and Doctorate degrees in Geosciences from the University of Arizona. She came to Ames as a National Research Council Postdoctoral Fellow in 1993 and began working for the SETI Institute in 1996.

Important Dates

Board Meeting – September 11 – 7:00 p.m.
-- October 9 – 7:00 p.m.
Western Addition Library, Scott & Geary Sts., SF

SFAA General Meeting – August 21
September 18
October 16
Morrison Planetarium, Golden Gate Park
Refreshments at 7:00 p.m. - Speakers begin at 7:30 p.m.

Mt. Tam Star Party
September 7 – 8:00 p.m.
October 12 – 7:30 p.m.

City Star Party
August 17 – 8:00 p.m.
September 14 – 7:30 p.m.
October 19 – 6:30 p.m.

2002 Club Officers & Contacts

<i>President</i>	Bill Stepka (415) 928-7105
<i>Vice President</i>	Nancy Cox (415) 826-2217
<i>Secretary</i>	Jason Burkhart
<i>Treasurer</i>	Chelle Owens (415) 479-5313
<i>Speaker Chair</i>	Robert Naeye
<i>City Star Party</i>	Randy Taylor
<i>Membership & Subscriptions</i>	Chelle Owens (415) 479-5313
<i>Bulletin Editor</i>	Lorrie Boen (415) 921-1432
<i>Telescope Loans</i>	Pete Goldie (415) 206-9867
<i>Honorary Director</i>	John Dobson
<i>Board Members</i>	Lorrie Boen Dan Christian Art Owens Michael Portuesi Al Stern Dennis Tye Jim Webster
<i>Alt. Board Members</i>	Rita Nossardi Stern Randy Taylor
<i>SFAA Website</i>	www.sfaa-astronomy.org

Club Telescopes

The SFAA owns 3 club loaner telescopes, Dobsonian/Newtownian reflectors: 6" f/10, 8" f/7, and 10" f/8. These 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 (pg@lbin.com) or phone (415-206-9867). Email communication is preferred and strongly recommended for a quick and accurate reply.

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 Lorrie Boen at 765 Geary Street #302, San Francisco, CA 94109 or at lorrenlee@aol.com

The Extreme Universe of Gamma-ray Astronomy: Exploding Stars, Blazing Galaxies and Giant Black Holes

Dr. Lynn Cominsky

**Sonoma State University - Department of Physics & Astronomy and
American Astronomical Society - High Energy Astrophysics Division**

August 21, 2002

Dr. Lynn Cominsky is a Professor of Physics and Astronomy at Sonoma State University (SSU). She leads the education and public outreach group at SSU, and is co-investigator for both the Swift Gamma Ray Burst Explorer and for the Gamma-ray Large Area Space Telescope (GLAST), two NASA missions that will explore the most energetic phenomena in the Universe.

From Your President

Mt Wilson Observatory holds a very special place in my heart. It is a place of great physical beauty with its deep blue skies, rocky cliffs, and a lush wooded environment. It is a place of deep history, where Einstein walked; Humason and Hubble discovered other Islands in the Sky and even Hawking left a thumbprint in the guest book of the 150-foot Solar Tower

That Solar Tower is the domain of a friend named Larry Webster who is the Chief Observer and Programmer/Analyst. He runs the place for the Department of Astronomy and Astrophysics at UCLA. Larry is a consummate historian in his field. He collects old spectrographs and historical documents.

Larry lives history as a part of his daily routine. His house is near the Old Monastery where the Astronomers who are visiting Mt. Wilson sleep. His dining room table is the very one where Hubble held a formal dining and discussion group every evening he was on Mt. Wilson. There are scientific instruments that Larry saved from destruction when it looked like Mt. Wilson would close its domes forever.

Larry through the force of persistence and hard work, was part of the team that saved Mt Wilson, a site where sub arc second seeing is considered normal. An entirely new interferometer telescope system, the CHARA Array, is being completed and the 100" Telescope has seen new life with two different types of adaptive optics systems. There is a 24' automated online telescope that helps educate younger students around the world. Then there is the beautiful Jules Vern artwork, the 60" Telescope.

As some of you know, I am a sustaining member of the Mt. Wilson Observatory Association and get to use the 60" Telescope a few times a year. On the August 10th a few days from today I will be down there again with our own Lorrie Boen, another association member. I have also had the great privilege of spending 2 weeks living there as part of the Consortium for Undergraduate Research and Education In Astronomy, CUREA. Nancy Cox and Dennis Tye also attended this program before me – they were also among the few amateurs to use the Hubble Space Telescope – but that is another story!

Neither I nor anyone else could have these wonderful experiences on Mt. Wilson had it not been for the tenacity and perseverance of great people like Larry Webster. I just wanted to have the opportunity to say thank you. My life would be so much less rich without your efforts!

Bill Stepka, Stepka@aol.com, and (415) 928-7105

50th ANNIVERSARY SPEAKER SERIES **"Women in Astronomy and Related Sciences"**

Morrison Planetarium
California Academy of Sciences

Wednesday October 16 – 7:00 PM

Dr. Debra Fischer

University of California at Berkeley, Department of Astronomy

Wednesday November 20 – 7:00 PM

Dr. Claire E. Max

Lawrence Livermore National Laboratory

San Francisco Amateur Astronomers and the
San Francisco Morrison Planetarium, California Academy of Sciences

Golden Jubilee 2002 Speaker Series
Celebrating Their 50th Anniversaries

PRESENT

Thursday September 5, 2002 at 7:30 PM
California Academy of Sciences

Timothy Ferris

Timothy Ferris, the author of twelve books among them the bestsellers The Whole Shebang and Coming of Age in the Milky Way will be our guest speaker. He is a frequent contributor to major magazines, TV shows and TV specials. He is also a consultant to NASA. Professor Ferris has taught in five disciplines at four universities, and is emeritus Professor at the University of California, Berkeley. He will be talking about his soon to be released book, Seeing in The Dark: How Backyard Stargazers Are Probing Deep Space, Charting Cosmic History, And Guarding the Earth from Interplanetary Peril.

**** Timothy Ferris' talk will be followed by a star party, telescopes provided by the members of the SFAA**

Admission is \$3.00 per program - Please send a check payable to "Morrison Planetarium" indicate which talk you wish to attend and how many tickets you are purchasing and a SASE to:

Jubilee Lectures
Morrison Planetarium
California Academy of Sciences
Golden Gate Park, San Francisco, CA 94118

**"The Golden Jubilee Speakers Series" is jointly presented by
the San Francisco Amateur Astronomers and
Morrison Planetarium of the California Academy of Sciences**

"Surfing the Solar System"

A Treasure Hunt Game on the Web from Family ASTRO at the Astronomical Society of the Pacific

A new treasure-hunt game and puzzle about the solar system is now available on the Web from the non-profit Astronomical Society of the Pacific. The web-based game is part of a new program called "Family ASTRO", which is developing activity kits and evening and weekend events that help families enjoy doing astronomy together. The address of the game is: www.astrosociety.org/education/surf.html. No fee or registration is needed to play the game -- just an interest in astronomy. A free Flash player is required, which can be downloaded from the game site.

In the "Surfing the Solar System" game, players are given clues in words and pictures to specific worlds or features among the planets and moons in our system. The first letters of the answers then spell out what is likely to be one of the most popular tourist attractions when travel among the planets becomes routine. The puzzle provides a clue for each question and suggests some sites for finding out more if you get stuck. Some of the questions are easy, while others require familiarity with solar system features that are somewhat off the "beaten track."

Family ASTRO is a new phase of Project ASTRO, a project that links volunteer astronomers and 4th - 9th grade teachers in 13 regional sites around the country. The family project is supported by a grant from the National Science Foundation. The web game is part of a larger kit of activities and games called "Race to the Planets." More information is available at: www.astrosociety.org/education.html.

SFAA Annual Picnic



September 14, 2002

Pine Lake Park at Stern Grove

(at the east end of Laguna Puerca)

access the park by Vale off Crestlake on the south side
the BBQ area is about 100 yards west of the parking area

Hamburgers and Hot Dogs will be provided.

Any contributions of other food items will be most welcome and gratefully devoured!!!

2002 MT TAM ASTRONOMY PROGRAMS

September 7 - 8:00 pm

Dr. Gibor Basri

University of California Berkeley

"What is a Planet?"

The Pluto controversy, discovery of "free-floating planets" and brown dwarfs, and the ambiguous nature of some extrasolar "planets", have led astronomers to reconsider what we mean by the word "planet".

October 12 - 7:30 pm

Tinka Ross

California Academy of Sciences

"Astronomy is Women's Work"

Historically some extraordinary women were able to overcome societal pressures and lack of opportunities to make significant contributions in astronomy.

Dinners with the speakers: at Mill Valley Wok, Tam Junction, 252 Almonte Boulevard, Mill Valley, 2 1/2 hours before the scheduled talk. To participate, call the restaurant at (415) 389-8868, and add your name to the "Mt Tam Party." The no-host dinner is usually \$15, including tax and tip.

Information: **Telephone: (415) 455-5370, (415) 388-2070 Same day Hotlines: (415) 566-2357, (415) 455-5370 (messages after 4:00 pm)** Mailing Address: **MTIA/Astronomy Programs, P.O. Box 3318, San Rafael, CA 94912**

**Astronomical Society of the Pacific
2002 Annual Meeting**

Paid Parking Permits Required for David Levy Lecture

The Astronomical Society of the Pacific is sponsoring a 2-day Annual Meeting on September 28 and 29 in the San Francisco Bay Area. There has been an important change to the Saturday evening portion of the meeting. David H. Levy will be giving a public lecture that evening at the Mountain Theater, near the summit of Mt. Tamalpais in Marin County. The lecture will be followed by a public star party hosted by the San Francisco Amateur Astronomers. Both the lecture and star party are free, but we have recently learned that Mt. Tamalpais State Park, which is co-sponsoring the event, is concerned about the possibility of overflow parking. The park has set up a procedure to minimize the chances that parking will become a problem. The park (not the ASP) is charging \$5.00 for parking permits for all visitors that evening. People can order pre-paid parking permits to guarantee they will have a parking space near the theater.

To purchase a pre-paid parking permit, send a self-addressed stamped envelope and a check for \$5.00 (payable to MTIA) to: MTIA Astronomy Programs, c/o Tinka Ross, 89 Dominican Drive, San Rafael, CA 94901.

Parking is limited, so we encourage visitors to car pool so more people can enjoy David Levy's talk and the star party. If MTIA does not sell all the parking passes before September 28, it will sell the remaining passes on a first-come, first-serve basis at the entrance gate to Mt. Tamalpais State Park.

Please contact Mercury magazine Editor Robert Naeye (rnaeye@astrosociety.org or 415-337-1100 x108) if you have any questions about Mt. Tamalpais parking, or anything else to do with the ASP's 2002 Annual Meeting.

Note:

There may also be a limited number of free parking permits for members of the SFAA who bring telescopes for the public Star Party after the lecture. Details are not yet known. They will be published on the website when available, and in the October issue of the bulletin (to be mailed on or about September 14).

Still looking: Bulletin Editor(s) A possible volunteer has expressed interest in serving as co-editor of the SFAA bulletin when I step down after the November issue. So, if you are also interested, please contact me at lorrenlee@aol.com. Two editors will make the job much easier. It is a very rewarding experience.

A Letter from the President of the ASP
By Alex Filippenko

Let me tell you a personal story about my introduction to the world of astronomy. As a kid, I had always been a science buff, playing at home with microscopes, magnets, and various gadgets. The snippets of astronomy that I heard in grade school and junior high were fascinating, and I yearned to learn more. So it was natural that I received a 6-cm refractor as a gift from my parents in December 1972, when I was a freshman in high school.

I still remember my first night with that telescope, nearly 30 years ago, as though it were only yesterday. Pointing toward a bright star, I was rewarded with a much brighter view, though of course it still looked like a tiny point of light with no details. A second bright star looked about the same, and the thrill was beginning to wane. I knew, though, that to find out where the "good stuff" is, I would have to consult more experienced amateur astronomers. So, I decided to have a quick look at a third bright star before giving up for the night. As I let go of the telescope and peered through the eyepiece, waiting for the jiggling to subside, I suddenly realized that I was viewing the planet Saturn, with its glorious set of rings! I was dazzled -

- the sight knocked my socks off! It didn't matter that millions of people had seen Saturn before; that night, in my mind, I had "discovered" Saturn on my own, and the amateur astronomy bug bit me hard... really hard.

I promptly joined the Santa Barbara Astronomy Club and was inundated with helpful observing advice, unbridled enthusiasm and camaraderie, great views of objects through telescopes much larger than mine, and informative presentations at the monthly meetings. I learned so much from my amateur astronomy buddies -- it was incredible. And they showed the same love for explaining the wonders of the heavens to laypersons during public star parties and other events. I personally witnessed many people enthralled, inspired, and awed by what they saw and heard, the majesty of the Universe grandly displayed before them. It became clear to me that amateur astronomers were highly effective in bringing science to the public.



Now, three decades later, I am the President of the non-profit Astronomical Society of the Pacific (ASP), a main goal of which is the public dissemination of astronomical knowledge. I would

not be in this fortunate position without my early exposure to amateur astronomy. Like you, we at the ASP want to explore the cosmos, and also excite and inform the general public about astronomy. YOU can help us by becoming a member of the ASP and thus supporting our educational activities - - including Project ASTRO (a national astronomy education program), The Teachers' Newsletter, an extensive catalog of astronomy-related products for educators and the public (members get a 10% discount), K-12 teachers' workshops, public lectures, and much more. Also, you'll receive our bimonthly Mercury magazine with insightful articles and other items. Please go to our web site at www.astrosociety.org and consider joining! Annual dues are only \$48 for individuals (\$35 for students) and \$75 for families.

Let me also take this opportunity to invite you to attend the ASP's public symposium, co-sponsored by the Astronomical Association of Northern California <http://www.aanc-astronomy.org/>, on September 29, in Pimentel Hall at the UC Berkeley campus. It is entitled "The Cosmic Thread: From Stars to Life," and features a stellar list of speakers (Seth Shostak, Geoff Marcy, Jill Tarter, David Morrison, and others). You can register at the ASP web site: \$35 for the general public, \$30 for ASP members, and \$25 for students. It is certain to be a great event.

Happy viewing!

Alex Filippenko
Professor of Astronomy
University Distinguished Teacher
UC Berkeley
alex@astro.berkeley.edu

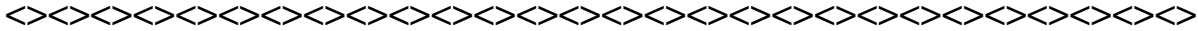
For Sale

Meade ETX 90 – this is the original model with a tracking motor (prior to the “go-to”) and has very nice optics. Included is a Bogen heavy-duty tripod with ball head for polar aligning – with a carry bag, both hard and soft ETX carry cases, 9.7mm Super Plossl eyepiece, 26mm LP Super Plossl eyepiece, Erect-Image Roof prism, 2x Telenegeative Barlow lens, solar filter (glass), & moon filter. This is a great first telescope and extremely portable. I am selling only because I want to upgrade. The whole lot is \$450. Please contact me if you are interested – lorrenlee@aol.com

The SFAA 2002 Awards

Observer of the Year Award

The Observer of the Year Award is given for noteworthy observing accomplishments during the year, such as qualifying for the Messier Award, the Herschel Club, observing all the planets, getting articles or photographs published, etc. Nominations will be accepted in October and November. Members may submit their own name or the names of anyone they feel is qualified. Candidates should prepare a list of their observing accomplishments in 2002 for judging by the December meeting.



Astrophotography Award

Members are encouraged to submit astrophotographs (up to three entries per member) for judging in the astrophotography award. Submissions are accepted October, November or at the December general meeting. All entries will be exhibited at the December meeting and voted upon by the general membership. Entries must have been taken this year (2002) and be of an astronomical theme. Size should be reasonable (11' x 14' or less), mounted or unmounted.

The Astronomical Arts Award

This contest is open to all members and will be judged by the membership at the December General Meeting. We had several fine entries at the inaugural competition last year. Any art related to astronomy is welcome. Your drawings of astronomical objects are worth sharing with other club members, as well as craftwork, sculpture, jewelry, and paintings.

There are almost no restrictions here. Size is a consideration since we have to fit all entries, and club members, in the Planetarium, alongside the Astrophotography Award entries. Also, no living critters, please. The Academy may frown on any living, breathing things that are not part of official exhibits. Live acts are restricted to the human kind.

Please bring your entries to the Meeting on December 18, 2002. Any questions can be directed to club officers, listed on page two in this bulletin.

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SFAA 2002 Literary Award

Ready, set, type!

- SFAA members only
- 1,100 words (big words, small words, any size words)
- Postmarked or emailed by September 30, 2002
- In print ready format, on a 3.5" diskette or zip disk, or as an attachment to an email (disks will be returned)
- Email to lorrenlee@aol.com. -- Mail to Lorrie Boen at 765 Geary Street #302, San Francisco, CA 94109
- Entries & ballot will be included in the November issue, to be mailed mid-October
- Awards presented at the SFAA Annual Awards Banquet in January 2002

Sponsored by our friends at



Bay Area Calendar of Events

<u>Date</u>	Event	Place & Time
September		
5	Golden Jubilee Speaker Series - Mr. Timothy Ferris with Morrison Planetarium star party following	7:30 PM \$3.00
7	Mt. Tam Star Party	Rock Springs, Mt. Tam 8:00 PM
11	SFAA Board Meeting - Members only	Western Addition Library 7:00 PM
14	City Star Party	Land's End, San Francisco 7:30 PM
18	SFAA General Meeting - Women In Astronomy Speaker Series – Dr. Virginia C. Gulick, NASA/Ames Research Center, Space Sciences Division	Morrison Planetarium 7:00 PM
28	ASP Annual Meeting & SFAA Star Party with David H. Levy, Comet Hunter	Rock Springs, Mt. Tam 7:30 PM
October		
9	SFAA Board Meeting - Members only	Western Addition Library 7:00 PM
12	Mt. Tam Star Party	Rock Springs, Mt. Tam 7:30 PM
16	SFAA General Meeting - Women In Astronomy Speaker Series - Dr. Debra Fischer, University of California at Berkeley, Department of Astronomy	Morrison Planetarium 7:00 PM
19	City Star Party	Land's End, San Francisco 6:30 PM
November		
13	SFAA Board Meeting - Members only	Western Addition Library 7:00 PM
20	SFAA General Meeting - Women in Astronomy Speaker Series - Dr. Claire E. Max, Lawrence Livermore National Laboratory	Morrison Planetarium 7:30 PM
December		
11	SFAA Board Meeting - Members only	Western Addition Library 7:00 PM
18	SFAA General Meeting – Members' Night, Art Award, Astrophotography Award & Election of Officers	Morrison Planetarium 7:30 PM

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, 13 Mabry Way, San Rafael, CA 94903

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
c/ Morrison Planetarium
California Academy of Sciences
Golden Gate Park, San Francisco, CA 94118



Information Hotline: (415) 566-2357

Web Page: www.sfaa-astronomy.org

Sharing the Wonders of the Universe