

★ ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 50, No. 3 – March 2002

The 50th Anniversary Speakers Series Women In Astronomy

“Scrutinizing Star Clusters with Space Observatories”

Adrienne Cool

March 20, 2002

The centers of some globular clusters are so densely packed with stars that stellar collisions are not only possible but probable. We will see how astronomers are using the Hubble Space Telescope and the Chandra X-ray Observatory to investigate the consequences of the collisions, both for the stars themselves and for the globular clusters they inhabit.



Important Dates

Board Meeting – March 13 – 7:00 p.m.

-- April 10 – 7:00 p.m.

Western Addition Library, Scott & Geary Sts., SF

SFAA General Meeting – February 20

March 20

April 17

Morrison Planetarium, Golden Gate Park

Refreshments at 7:00 p.m.

Speakers begin at 7:30 p.m.

Mt. Tam Star Party

April 13 – 8:00 p.m.

May 11 – 8:30 p.m.

City Star Party

February 16 – 5:30 p.m.

March 16 – 6:00 p.m.

April 20 – 8:00 p.m.

2002 Club Officers & Contacts

<i>President</i>	Bill Stepka (415) 928-2367
<i>Vice President</i>	Nancy Cox (415) 826-2217
<i>Secretary</i>	Jason Burkhart
<i>Treasurer</i>	Chelle Owens (415) 479-5313
<i>City Star Party Coordinator</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

“Astronomy is Woman's Work”

Tinka Ross
February 20, 2002

Tinka's talk, “Astronomy is Woman's Work” will be on the history of women in astronomy. She will discuss the major contributions to science of women in the past as well as the contributions of women scientists today and their current role in the field of astronomy.

From Your President

Thank you for allowing me the pleasure of serving as your President in this, our 50th year as the San Francisco Amateur Astronomers. The board of directors and speaker chair have planned a wonderful year of celebration for us, along with a joint program with the Morrison Planetarium. Look for details in future Bulletins and join us at the Planetarium for a great speaker series that you will not want to miss!

I must start out my term by expressing my deepest gratitude and appreciation for the great efforts of Al Stern in leading us over the last four years. He is this year's recipient of our highest honor, the Herman Fast Award. Aside from many years as a volunteer at the venerable Astronomical Society of the Pacific, Al is also the new Planetarium show speaker at Morrison. I look forward to his good advice as a board member over the next year.

I ask you to let me know in what directions you would like to see the SFAA move, beyond our 50th anniversary year. Please consider volunteering in your area of interest to help those people who may be less experienced or new to Astronomy. Think about running for the Board of Directors or as an Officer. Come as a visitor to a Board meeting and tell us what is important to you in the world of Amateur Astronomy.

We all lead lives that are too hectic, and Astronomy gives us a wonderful perspective, to counter the chaos that too often passes for every day life. Recent horrific events reinforce the need to seek something greater than everyday toil in the search for meaning. For many of us the wonders of the Cosmos fulfill that need.

One of my favorite quotes comes from Albert Einstein, "The most beautiful thing we can experience is the mysterious. It is the source of all true art and science". The first time I held a pair of binoculars over that fuzzy patch in the sky and resolved the Andromeda Galaxy I truly understood what Einstein meant. Let us, together help the SFAA show the wonder of such Island Universes far into the future!

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

SFAA 50th Anniversary SPEAKER CALENDAR 2002

Women In Astronomy & Related Sciences Series

May 15, 2002

Celebration of the SFAA's 50th Anniversary

In celebration of our 50th anniversary, the daughter of our member, Bob Berta will be playing the flute with members of her flute ensemble. They will be playing Space Music to Hubble Telescope images and other breathtaking images of space choreographed by Toney Burkhart. Then two of our founding members, Lou Epstein and Betty Neal will talk to us about their memories of the history of the SFAA. Some special edible treats will be a part of this celebration.

SFAA 2001 Awards Winners

Herman Fast Award

Al Stern

Service Award

Joe Amato

Observer of the Year Award

Linda Mahan

Astrophotography Award

First Place

Bob Berta

Rosetta Nebula

Second Place

Jim Uber

Partial Star Eclipse

Art Award

First Place

Linda Mahan

Second Place

Nancy Cox

Third Place

Dennis Tye

Honorary Mention

Jim Uber

Literary Award

First Place

Jayson Wechter

Astronomy Essay

Second Place

Lorrie Boen

Summer Storms

Third Place

Jane Houston Jones

Birdwatching

The San Francisco Amateur Astronomers would like to thank

Orion Telescopes, for their support. Orion generously sponsored the Literary Award again this year, delighting the winners with gift certificates for the Orion Telescope catalogue.

Particularly, we would like to thank Marshall Smith of Orion Telescopes, who has given his time and support to the club, especially with respect to the Literary Award in the last two years.

Also, thank you to Norman and Linda Mahan for their kind donation of the "Moon Cubes" used as first place prizes in the Astrophotography and Art Awards.

Our thanks go to all of the members who entered these competitions, too. Thank you for your participation and hard work!

Adrienne Cool – A Brief Bio

Adrienne Cool is a native of New York City, and got undergraduate degree in physics at Yale University. She spent a few years after college working on medical imaging techniques, and then went to Columbia University where she did a Master's degree in electrical engineering. During that time Adrienne happened on some popular astronomy books and decided that astronomy was for her. She bought a pair of binoculars, learned the constellations from her rooftop in Brooklyn, and went off to a PhD program in astronomy at Harvard. She came to the San Francisco Bay Area for her post doc at Berkeley, and have now pretty much adjusted to the ocean being on the wrong side. She is currently an associate professor in the Department of Physics and Astronomy at San Francisco State University, where she have been since 1996.

FOR SALE

ETX90EC with an equatorial tripod, both with carrying cases, the Tirion Skyatlas, various eyepieces, a barlow lens, Autostar Computer, Power Adaptor for both 120AC and 12DC, a Thousand Oaks Sun Filter and a detachable 6x30 finder with a sun filter that can be adapted. The price for everything is \$600, very good for all this little used equipment. Also, Celestron Ultima10x50 Binoculars for \$100, less than half the selling price.

**Contact: Robert Gottlieb
tel: 415 - 885 2256
fax: 415 - 885 4350
robertgottlieb@earthlink.net**

Silicon Valley Astronomy Lecture Series:

Dr. Debra Fischer
University of California, Berkeley
"Planets Beyond: The Search for Other Solar Systems"
Wednesday, March 6, 2002

in the Smithwick Theater, Foothill College, El Monte Road and Freeway 280, in Los Altos Hills, California

Free, non-technical, and open to the public.

Call the series hotline at 650-949-7888 for more information.

co-sponsored by: NASA Ames Research Center, Foothill College Astronomy Program SETI Institute
Astronomical Society of the Pacific

Dr. Fischer (part of the team of astronomers who have found most of the planets around other stars) was instrumental in the discovery of the first system of planets known outside our own – around the star Upsilon Andromedae. She will discuss what the latest discoveries are telling us about planetary systems (with more than one planet around a star) out there and the possibility that there are not just Jupiters around other stars, but Earths.

NOTE: The lecture is free, but there is a parking fee of \$2 for all cars at Foothill College. There are often lines for parking permit tickets in the lots just around 7 pm, so attendees are urged to come a bit early to have enough time to park.

Morrison Planetarium's
Benjamin Dean Lecture Series
presents
The Multi-Colored Sky

February 26

Dr. Jack Welch, UC Berkeley

Radio Astronomical Arrays for the Future: Astronomy, SETI and More

Astronomers use long radio wavelengths to probe the deepest mysteries of astronomy and astrophysics. Find out the new ways in which astronomers will attempt to observe the sky in these wavelengths and what they hope to tell us.

March 19

Dr. Michael Bicay, SIRF Science Center

Lifting the Cosmic Veil through Infrared Astronomy

The cosmos reveals fascinating new insights when studied with light in wavelengths longer than the human eye can see. The first infrared satellite surveyed the cosmos in 1983. What scientific results have been obtained since then and what do astronomers hope to learn in the next 15 years?

April 9

Dr. Mike Shull, University of Colorado

Next Generation Ultraviolet/Optical Telescopes in Space

Earth's atmosphere not only blurs images from space, but also block many wavelengths of light, limiting our view of the Universe. On the heels of the Hubble come the new ideas for space telescopes that will extend our view of into the ultraviolet.

May 7

Dr. Harvey Tananbaum, Harvard Center for Astrophysics

X-Ray Telescopes: Present and Future

With the launch of the Chandra X-ray Observatory in July, 1999, astronomers can now obtain high resolution images of the x-ray sky. This talk will show some recent Chandra results and will describe x-ray telescopes planned for the next two decades.

June 4

Dr. Valerie Connaughton, University of Alabama

Gamma Ray Astronomy

Gamma rays, the Universe's most energetic light, are difficult to capture in telescopes. How do astronomers study gamma rays and what do they hope to learn from them? Discover some of the stranger objects seen at this end of the spectrum.

All programs begin at 7:30 p.m. in the Planetarium - Tickets are \$3.00 each
DEAN LECTURE INFORMATION LINE at (415) 750-7141



**THE ASTRONOMICAL SOCIETY OF THE PACIFIC &
THE ASTRONOMICAL LEAGUE SURVEY
AMATEUR OUTREACH**

The Astronomical Society of the Pacific (ASP), in conjunction with the Astronomical League (AL), is conducting a web-based survey of amateur astronomers who do, or want to do, public outreach activities of any kind. Funded by the National Science Foundation, the survey will help the ASP and AL make informed decisions about what kinds of materials or activities might help amateurs do more and better outreach. The survey is part of an NSF planning grant called Amateur Astronomers as Outreach Ambassadors.

“We know that most amateur astronomers concentrate on observing. But many amateurs express their enjoyment of astronomy by helping others enjoy the universe through public star parties, school visits, talks to youth and community groups, and other activities,” says ASP Executive Director Mike Bennett, principal investigator for the survey. “We want to hear from any amateur astronomer who has ever done outreach, or who thinks he or she might want to. Eventually, this will lead to improved products and services to help amateur astronomers improve the quality and quantity of their public outreach efforts.”

“Hundreds of amateur astronomers in the United States have conducted public outreach to schools, scout groups, churches, and other organizations. Most have never had the benefit of having anyone help them put together a presentation package for outreach activities. The ASP’s project will help us provide such assistance,” says Barry Beaman, past President of the AL and current AL liaison to the ASP. “My great hope is that this assistance will help not only those already pursuing public outreach, but encourage many others to go out and tell the public about our wonderful universe. The Astronomical League is very pleased to be a part of this important project.”

The survey is available through the ASP’s website at www.astrosociety.org/education/astronomer-survey.html. It should take about 10 minutes to complete. The ASP expects to make the results of the survey available by late 2002.

The non-profit Astronomical Society of the Pacific was founded in 1889 in San Francisco, and is still headquartered there today. The ASP has since grown into an international society. Its membership is spread over all 50 states and 70 countries and includes professional and amateur astronomers, science educators of all levels, and people in the general public. The ASP publishes the bimonthly Mercury magazine for its members, a technical journal for professional astronomers, and an on-line teachers’ newsletter. The ASP also coordinates Project ASTRO, a national astronomy education program. The Society produces a catalog of extensive astronomy-related products for educators and the public.

The Astronomical League (www.astroleague.org/) is a non-profit federation of more than 250 local astronomy societies across the United States. These organizations, along with Members-at-Large, Patrons, and Supporting members, form the largest amateur astronomical organization in the world. The AL’s basic goals are to encourage an interest in astronomy (and especially amateur astronomy), and to promote astronomy education and astronomical research throughout the United States. The AL publishes a quarterly newsletter called The Reflector.

Have you visited the website lately? Our Webmaster, Joe Amato, has been working feverishly, improving and expanding the site. There is a new bulletin board. Also, if you haven’t received your “Member’s Only” login and password, click the link! Go to www.sfaa-astronomy.org

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:

- \$25 enclosed, individual membership
- \$30 enclosed, foreign membership
- \$30 enclosed, family membership
- \$30 enclosed, institutional membership
- \$ 8 enclosed, youth membership (under 18)

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