

# ★ ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 53, No. 9 – SEPTEMBER 2005

**September 21, 2005 – General Meeting**

RANDALL MUSEUM 199 MUSEUM WAY SAN FRANCISCO  
7:00 PM DOORS OPEN . 7:30 PM ANNOUNCEMENTS . 8:00 PM SPEAKER



**SUN KWOK**  
University of Calgary

**COSMIC BUTTERFLIES:  
THE COLOURFUL MYSTERIES  
OF PLANETARY NEBULAE**

At the end of a star's life, it wraps itself in a cocoon by spilling out gas and dust. Sometime later, a butterfly-like nebula emerges from the cocoon and develops into what astronomers call a planetary nebula.

Recent observations by the Hubble Space Telescope have revealed the details of this transformation. In

this talk, we will summarize our modern understanding of planetary nebulae and show how research on planetary nebulae has impacted other fields ranging from the mapping of dark matter to new insights into the origin of life.

*Dr. Sun Kwok is faculty professor at the University of Calgary and distinguished research fellow of the Institute of Astronomy and Astrophysics, Academia Sinica of Taiwan. He served as chairman of the Planetary Nebulae Working Group of the International Astronomical Union between 1994-2001, and co-chaired the 2001 IAU symposium on planetary nebulae in Canberra, Australia. He is the Canadian principal investigator of the submillimetre-wave astronomy space mission Odin, which was successfully launched in 2001. He has two recent books on planetary nebulae published by the Cambridge University Press: "The Origin and Evolution of Planetary Nebulae" in 2000 and "Cosmic Butterflies" in 2001.*

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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](mailto:treasurer@sfaa-astronomy.org). Contact Sam Sweiss at Scope City to arrange for your discount.

## 2005 CLUB OFFICERS & CONTACTS

President	John Dillon	(415) 332-8096
Vice President	Steve Bryson	
Secretary	Jennifer Myers	(415) 386-7576 jenfrey@earthlink.net
Treasurer	Stefanie Ulrey	
Speaker Chair	Linda Mahan	
City Star Party	Randy Taylor	(415) 255-8670 randytaylor3@aol.com
Membership & Subscriptions	Stefanie Ulrey	sulrey1680@aol.com
Bulletin		
Editor-in-Chief	Phil Estrin	(510) 622-2428
Associate Editor	Annette Gabrielli	(415) 703-4539 agabrielli-sfaa@sbcglobal.net
Telescope Loans	Pete Goldie	(415) 206-9867
Honorary Director	John Dobson	
Board Members	Russell Cashin	(415) 823-7545
	Peter Schumacher	
	Jorge Morales	(510) 337-1446
	Kenneth Frank	
	Robert English	(415) 383-6475 sfaa@bogusnet.net
	Nancy Cox	(415) 269-8259
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## MEMBERSHIP DUES

The mailing label on the back of this issue shows the month and year through which your membership was paid. If the date has passed, your membership has expired. Members may receive no more than one bulletin after the expiration of membership.

Please renew soon if your membership is expiring.

## ONLINE SERVICES FOR SFAA MEMBERS



The SFAA's Secretary's Web Site helps keep SFAA information together and accessible to members. The site URL is <http://www.whiteoaks.com/sfaa/>. At this site you can find such information as minutes from meetings of the Board of Directors, the SFAA official by-laws, and other information. SFAA also offers email lists to supplement the bulletin board offered at the SFAA's official web site.

At present there are two email lists – an unmoderated list for use primarily for business and discussion by the Board of Directors (but open to all members), and a moderated announcement list for all SFAA members. If you would like to be added to the SFAA-announce email list, please contact the secretary (<mailto:secretary@sfaa-astronomy.org>) and let him know. You can also sign up for the list yourself at this URL: <http://www.whiteoaks.com/mailman/listinfo/sfaa-announce>

## CLUB TELESCOPES



The SFAA owns 4 club loaner telescopes, Dobsonian/Newtonian reflectors: 6" f/10, 8" f/7, and 10" f/8 and a Starblast. 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.

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## 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>

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*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](mailto:pestrin@dir.ca.gov).

## Through the Finder ...

The AANC Conference on August 27 was a great success – for conferees, for Birthday celebrants and for the general public. Conferees got a day long slate of top-notch presentations, Dobsonians got a chance to say Happy 90<sup>th</sup> Birthday John, and the public had a fun Day and Night of workshops, talks and telescopes. Nearly 800 people came to the Randall Museum event and both the comments and the cash flow were very positive. Lots of folks helped but the inspiration, and much of the perspiration, came from Ken Frank. He put in months of planning and promoting behind a blizzard of email and somehow kept everything in motion and in focus at the same time. Thanks, Ken.

Now then, the fog is waning, Mars is waxing, temperatures warming, and an equinox approaching. There's 2 public star parties and a members-only night on Mt. Tam, space left at Camp Mather, and our Oct. 1 StarBQ at Bootjack camp. You'll have to work hard to find an excuse not to get out under the stars this month.

See you in the dark,

**John Dillon, President of SFAA**

\* \* \* \* \*

## San Francisco Amateur Astronomers Speaker Schedule

### Randall Museum, 199 Museum Way, S.F. 7:30 pm

Be sure to attend the fine talks scheduled for the balance of this year.



with us.

**October 19<sup>th</sup> Geoff Marcy** will talk to us about his Cal Berkeley team's experiences in the discovery of 107 of the 160 known Extra-Solar Planet, using the 120 inch Lick Observatory telescope and the 10 meter Keck Telescope in Hawaii. His topic is entitled "The Hunt for Habitable Worlds". SFAA is pleased he is taking time to be



**November 16<sup>th</sup>. Chris McKay** spoke to SFAA two years ago, to a large attendance and promised an exciting new talk, that he will announce to us soon.

**December 21<sup>st</sup> Member's Night.** This is a special night to begin thinking about now. Plan to submit your work of Astronomy related Art, or Astronomical Photography, using any kind of camera. Consider giving a presentation at the meeting, or submit ideas for all the members to discuss. We will have a longer time for snacks and judging member's works. Be sure to attend. To give a talk, contact Linda Mahan at [doublestar@comcast.net](mailto:doublestar@comcast.net)

**January 2006. Annual Awards Banquet Night.** You do not need to be a potential contest winner or incoming Officer or Board Member to come and enjoy this night. Many have been attending for years, and many more members will find a night with SFAA friends, good food and drink and time to talk together the perfect way to begin our Astronomical Year.

If you have any comments or suggestions, contact Linda Mahan at [doublestar@comcast.net](mailto:doublestar@comcast.net) Thank you.

## **IMPORTANT UPCOMING DATES**

### **BOARD MEETINGS**

Tuesday, September 6

Tuesday, October 4

Tuesday, November 1

7:00-8:30 p.m.

*Randall Museum, 199 Museum Way*

*(Near 14<sup>th</sup> Street and Roosevelt)*

### **SFAA GENERAL MEETINGS & LECTURES**

Wednesday, September 21

Wednesday, October 19

Wednesday, November 16

7:00 p.m. Doors open . 7:30 p.m. Announcements . 8:00 p.m. Speaker  
*Randall Museum, 199 Museum Way (Near 14<sup>th</sup> Street and Roosevelt)*

### **CITY STAR PARTIES**

Saturday, September 24 - 7:00 p.m. – Telescope Clinic 6:00 p.m.

Saturday, October 22 – 6:00 p.m. – Telescope Clinic 5:00 p.m.

Saturday, November 5 – 5:00 p.m. – Telescope Clinic 4:00 p.m.

*Land's End, San Francisco*

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

### **MOUNT TAM PUBLIC STAR PARTIES**

Saturday, September 10, 8:00 p.m.

Saturday, October 8, 7:30 p.m.

### **SAN FRANCISCO AMATEUR ASTRONOMER'S ROCK SPRINGS MEMBERS ONLY EVENTS**

(AT OR NEAR NEW MOON)

#### **MOUNT TAMALPAIS – ROCK SPRINGS**

Saturday, October 1 – 7:00 p.m. – PRECEDED BY ANUAL SFAA BOOTJACK STAR-B-QUE (MEMBERS ONLY) AT 3:00 P.M.

Saturday, October 29 – 7:00 p.m. (Mars Opposition)

**Saturday, September 10, 8:00pm**

## **2005 MT. TAM ASTRONOMY PROGRAMS**

### **Mountain Theater on Mt Tam**

**What are black holes? How are they discovered? How do they give rise to some of the most remarkable and bizarre phenomena in the universe?**

Come to the Mt Tam Astronomy Program on to hear

**Dr. Eliot Quataert** from UC Berkeley present

*“Black Holes: The Science Behind the Science Fiction”.*

The talk starts at 8:00pm in the Mountain Theatre and is followed by observing through telescopes in the Rock Spring Parking Area with the San Francisco Amateur Astronomers, weather permitting.

Event sponsored by the Mt Tamalpais State Park and coordinated by volunteers of the Mt Tam Interpretive Association. All programs are FREE and open to the public. Families and students encouraged to come. Dress warmly and car pool if possible. Bring a flashlight!

If the weather is questionable, call the Astronomy Program Hotline 415-455-5370 after 4:00pm before heading up the mountain.

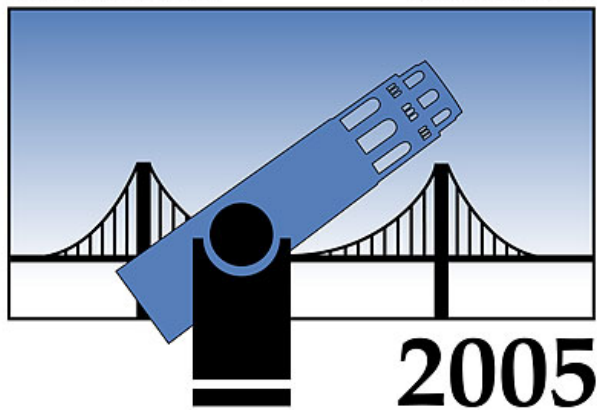
For additional information or to see the entire season of talks check our website: [www.mttam.net](http://www.mttam.net).

Thank you for forwarding or otherwise sharing this information.

**Tinka Ross**

# AANC CON

Randall Museum, San Francisco AANC • WAA • SFAA • SFSA



August 27, 2005 dawned as a beautiful day in the Bay Area. And rightly so with the 2005 AANC Conference being held at the Randall Museum to honor John Dobson on his 90th birthday. The conference was a rousing success with more than 500 people attending the conference proper and over 200 for the star party that night.

Numerous astronomy aficionados lent their support to the success of the conference particularly with their gracious volunteering throughout the day and night. A vast number of telescopes were set up on the east lawn of the Randall - everything from solar telescopes to hand-made works of art to give the viewing public dynamic views. Also, everyone got to see what it takes to grind a mirror and there were astro-art activities for children of all ages.

Conference presentations included such notable speakers as Mr. John Dobson, Mr. Timothy Ferris, Mr. Richard Crisp, Ms. Lynette Cook, Mr. Steve Gottlieb, Mr. John Dillon, Mr. Chad Moore, Ms. Marni Berendsen, Mr. Bob Schalck. Attendees were able to interact with these wonderful speakers through a Q&A session as well.

Recipients of the 2005 Amateur Astronomers of Northern California Service Awards were Vic Maris/StellarVue-Commercial Award, Sam Sweiss-John Goodricke Award, Mike Koop-Amateur Award, Darryl Stanford-Professional Award, Marshal Merriam-Special Award.

Prizes for the very popular and highly successful raffle were generously donated by many vendors including Vic Maris of Stellar Vue <http://www.stellarvue.com/> Sam Sweiss of Scope City, <http://www.scopecity.com/index.cfm>, representing Parks, Lumicom, Meade, Celestron, William Optics, Televue, JMI and Starry Night, the Yang brothers of William Optics <http://www.william-optics.com/> and Gary McAnally of Apoge Instruments <http://www.ccd.com/>.

## **FIRST PRIZE STELLARVUE NIGHTHAWK 80MM F-6 OPTICAL SYSTEM WITH STELLARVUE DOUBLET ACHROMATIC LENS WON BY PETER YEE**



Peter Yee became interested in practical astronomy when his uncle showed him the sun through a Dobsonian solar telescope he had built. Wanting to be able to see the universe for himself, at the age of 10, Peter along with his parents took John Dobson's class at the Lawrence Hall of Science and completed an 8" Dobsonian that has given him many nights of enjoyment through the years. The only problem with the telescope is its size, so he was thrilled to win the refractor at the AANC-CON. Peter also took John's introductory astronomy class the following year at the Albany

Adult School. Peter's current work is a project manager at RSA Security in San Mateo and was previously an engineer at NASA Ames Research Center. The Stellarvue Nighthawk is living up to its name where just last weekend he observed in Eastern Nevada. "It was a real pleasure for me to attend and I look forward to being more involved in astronomy once again. I'm joining SFAA and SJAA, living as I do between the two."

**SECOND PRIZE**  
**WILLIAM OPTICS SWAN 2-INCH 40MM EYEPIECE – FULLY MULTICOATED ADVANCED DESIGN**  
**WON BY MILVIA OSSONIAK**



In 1998 Milvia Ossoniak was visiting the old Griffith Observatory with a friend during one of her many world wide sojourns. As a memory souvenir gift to herself she bought a little blue book. It just happened to be the Peterson Field Guide to the Stars and Planets. Two years later after many trips she opened a suitcase that had been in storage and thought it might be a good read for bedtime. What Milvia found out, that contrary to thinking it would put her to sleep, she set her alarm depending on what was up! Well, from that point on she was hooked. Mastering many languages and arts including music, she became fascinated with the idea of making her own telescope. She signed up for John Dobson's class at Dominican College 8 years ago but they were already 6 weeks into the class. Not giving up, she enlisted John to help her finish her mirror. Milvia found it an amazing experience making something so useful with her own hands under John's tutelage. She was truly amazed to win the wonderful 2" William Optics Swan 40mm eyepiece. It will get lots of public astronomy use. Thank you.

These Amateur Astronomer Volunteers did a wonderful job of making this event a success:

Mike Arrajj	Rhonwyn House	Michael Portuesi
Bob Alborzian	Kate Judge	Bob, Mary and Jonathan Schalck
Katie Barmazel	Mike Linnolt	Peter and Barbara Schumacher
Dave Barosso	James Mace	Mark Thein
Loretta Botta	Stacy Jo McDermott	Jung Thomas
Celeste Burrows	Robert Michaud	Sara Wiehe
Janet Davis	Mark Mickels	Earl Wilson
Sarah Davis	Jorge Morales	Ivy White
Aeddán Frank	John Muhilly	Doug Wolff
David Frey	Anna Myers	Wendy Wood
Annette Gabrielli	Jennifer Myers	Elaine Yu
Pete and Sarah Goldie	Len Nelson	

The "Friends of the Randall" were wonderful assistants as well. Bravo!  
*The AANC-CON Committee thanks you all for your hard work and dedication.*

The Astronomical Association of Northern California has been facilitating amateur astronomy in the San Francisco Bay Area since 1972 and works with many clubs in the Northern California region to foster the hobby and interest of astronomy. For more information and a listing of clubs, please go to [www.aanc-astronomy.org](http://www.aanc-astronomy.org).



To commemorate the event why not buy a pin? They'll be on sale at the September 21st meeting. T-shirts and mugs can still be purchased from the CON website. <http://www.planitarium.net/aanc/aanc-con2005/tees-n-pins/index.html>



### PROCLAMATION

WHEREAS, the City and County of San Francisco is proud to recognize and honor one of its most extraordinary citizens, John Dobson; and

WHEREAS, Mr. Dobson has been one of this country's most influential people in amateur astronomy in the last 30 years, serving the people of the City and County of San Francisco with distinction, innovation; and

WHEREAS, San Francisco owes a debt of gratitude to Mr. Dobson for his accomplishments in encouraging the citizens of this planet to think and wonder about the universe and give them a chance to see its beauty with their own eyes, all the while earning the admiration and respect of his colleagues; and

WHEREAS, Mr. Dobson has dedicated his life to public service as a teacher of cosmology and telescope making and his accomplishments are many and known to all astronomers worldwide, as he has almost single-handedly revolutionized astronomy by making deep space accessible to millions; now



THEREFORE BE IT RESOLVED,  
that I Gavin Newsom, Mayor of the City and County of San Francisco, join with friends, family and colleagues in honoring John Dobson on the occasion of his 90th birthday, for his dedication, hard work and devotion to public service promoting astronomy advancement, and do hereby proclaim August 27, 2005 as...

**JOHN DOBSON DAY**  
In San Francisco!



*Valley of the Dobs*



*Valley of the Dobs*



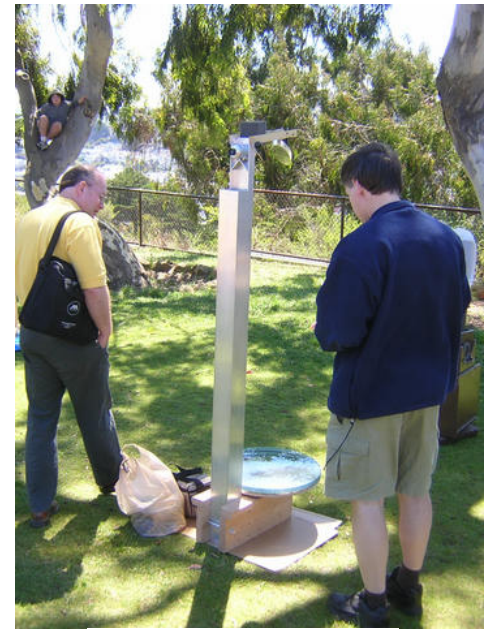
*Valley of the Dobs*



*Mirror grinding*



*Solar viewing  
Sam Sweiss and Michael Portuesi*



*Valley of the Dobs*



*Stacy Jo McDermott / Valley of the Dobs*





*Vic Maris, Sam Sweiss, John Dillon*



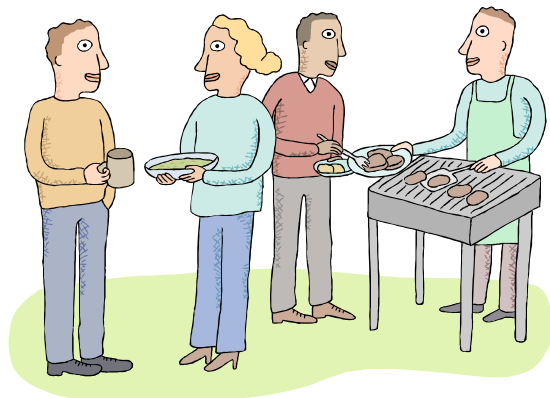
*Sam Sweiss with 2005 Riverside Telescope Makers Conference Astronomer's Choice Award winners Katie Barmazel, Ivy White & Sarah Davis of Santa Rosa Girl Scout Troop 83*



*AANC President, Walter Hieges, presents the 2005 Amateur Astronomers of Northern California Awards to Vic Maris-StellarVue – Commercial Award (upper left), Sam Sweiss-John Goodricke Award and Darryl Stanford-Professional Award (upper right), and Marshall Merriman-Special Award (lower left).*



**Saturday, October 1, 2005, 3:00 p.m.**  
**SFAA ANNUAL PICNIC**  
**Bootjack Picnic Area, Mount Tamalpais State Park**



Come to the 2004 San Francisco Amateur Astronomers Annual Picnic and Star B Q! Hamburgers and hot dogs will be provided. Pot luck contributions of other food items will be most welcome.

Evening Star Party: Rock Springs Parking Lot, Mount Tamalpais State Park (site of our regular star parties on Mount Tam). After the picnic, stay for a private SFAA-only star party at sunset. Bring your telescope/solar scope along and join in the fun!

If you plan to attend, please send e-mail to Stephanie Ulrey at [treasurer@sfaa-astronomy.org](mailto:treasurer@sfaa-astronomy.org) or call (415) 441-0291. We need an accurate count so there's no waste of food and supplies.

**UPCOMING CITY STAR PARTY LECTURES**  
**Land's End, San Francisco**

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

**When:** Saturday, September 24, 7:00 p.m.  
**Subject:** The First Telescope ?!  
**Speaker:** John Dillon, SFAA President

When, where, how and by whom was the first telescope made? The questions are straightforward, but the answers are not as easy or obvious as most textbooks make out. The story involves merchants, magicians and microscopes as much as Galileo and his "optic stick," and exploring it reveals a lot about how modern science began.

Besides being our President, John Dillon is Curator of Natural Science at the Randall Museum in San Francisco. He teaches History and Philosophy of Science at the University of California Extension and the California Academy of Sciences. If you haven't heard one of his lectures, you have missed out.

**When:** October 22, 2005 at 6:00pm  
**Subject:** Mars: Then and Now  
**Speaker:** Michael Portuesi  
SFAA Board member and past President

Long before Viking, Mars Pathfinder, and the Spirit/Opportunity rovers, 19th-century observers Giovanni Schiaparelli and Percival Lowell studied Mars using the state-of-the-art telescopes of their era. Their discoveries dominated our knowledge of Mars right up until the Space Age in the 1960's.

We'll touch upon the connection between those astronomers of old and today's amateur astronomers. We'll also look at today's Mars as revealed by NASA and European space missions.

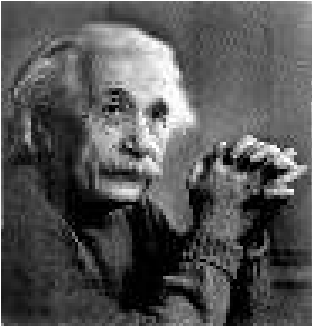
Here are a few things you might not know about our past President, Michael Portuesi. He edits the San Francisco

Sidewalk Astronomers website. He holds Astronomical League observing certificates for deep-sky and solar observing and is pursuing several more. He has published articles in Night Sky magazine and other publications, and appeared on national television for TechTV. His past SFAA talks have covered the lives of stars, the Moon, the Sun, viewing nebulas, handheld computers for astronomy, and telescope basics. See his websites at <http://astro.jotabout.com> and at <http://www.sfsidewalkastronomers.org>.

**When:** November 05, 2005 at 5:00pm  
**Subject:** Myths around the Ecliptic  
**Speaker:** Jennifer Myers, SFAA Secretary

The Ecliptic has been recognized for millennia as the path along which we see Sun, Moon, and "wandering stars" travel. Although we now know that it is actually the plane in which planets orbit the Sun, we have inherited from the ancients a wealth of mythical lore surrounding the importance of this part of the heavens, divided as it is into the twelve constellations of the Zodiac. The stories, some of which have survived from the time of the Chaldeans and Sumerians, reveal not only something of the philosophy of the cultures that created them, but also an intimacy with the night sky that was part of everyday life in the earliest history of human sentience.

Jennifer Myers considers herself a very junior member of the SFAA, in spite of which she currently serves as its Secretary. As a child growing up in San Francisco, she recognized exactly one "constellation" (guess which one), so learning about astronomy these days is a source of perpetual revelation. Apart from astronomy, she also enjoys bird watching, walking, making stained glass windows, and travel, among many other things.



**Wednesday, Sept. 28, 2005, 6:30 pm**  
**EINSTEIN FOR EVERYONE:**  
**HOW ASTRONOMERS ARE PROVING EINSTEIN'S MOST BIZARRE IDEAS**  
**ABOUT SPACE AND TIME**

Andrew Fraknoi (Chair of the Astronomy Program at Foothill College)  
A non-technical, illustrated lecture  
Sunnyvale Public Library  
665 West Olive Avenue  
Sunnyvale

Free and open to the public, but tickets must be obtained in advance from the Adult Information Desk at the library (tickets available starting Sept. 14 on a first come, first served basis; maximum of 4 tickets per person)

No background in science or math required!

A look at some of the strange predictions of Einstein's Theory of Relativity and how advanced telescopes on Earth and in space are allowing astronomers to demonstrate just how right Einstein's insights into the nature of space and time really were. There will be a particular focus on black holes large and small and why they may be more common than even Einstein dared to think.



**Wednesday, October 5, 2005, 7:00 p.m.**  
**Silicon Valley Astronomy Lecture Series**

**Astronomer Cynthia Phillips**  
**JUPITER'S TANTALIZING MOON:**  
**WATER (AND LIFE?) UNDER THE ICE OF EUROPA**

Non-technical, illustrated talk  
Smithwick Theater, Foothill College  
El Monte Road and Freeway 280, Los Altos Hills, California

Ever since robot spacecraft have been exploring the Jupiter system, one moon has especially captured the interest of astronomers. Although Europa's surface is cold and frozen, there is evidence that, under the ice, it has an ocean of warmer, liquid water. In her talk, Dr. Phillips will explore Europa's geology, focusing on the prospects for water and the possibilities of life in that deep alien ocean.

No background in science will be required for this talk, which will interest both fans of astronomy and the search for life.

*Dr. Phillips is a Principal Investigator for a number of projects investigating Europa and Mars at the SETI Institute. She specializes in the geology of planetary surfaces and the search for life in the solar system. She worked with the Galileo spacecraft imaging team to help design observations of Europa and other moons of Jupiter. She is co-author of "The Everything Astronomy Book" and "The Everything Einstein Book," both published by Adams Media.*

Free and open to the public. Parking on campus costs \$2.  
Call the series hot-line at 650-949-7888 for more information.

Co-sponsored by:      \* NASA Ames Research Center      \* The Foothill College Astronomy Program  
                                 \* The SETI Institute                              \* The Astronomical Society of the Pacific

Founded in September 1952, the San Francisco Amateur Astronomers (SFAA) is an association of people who share a common interest in astronomy and other related sciences. Our membership consists of people from all walks of life, educational backgrounds and ages. Many SFAA members own their own telescopes; some have been made by hand in local telescope-making classes and vary in size from 6 to 25 inches.

**Treasurer, SFAA, POB 15097, San Francisco CA 94115**

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

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

**Select one category:**

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Name: Telephone:

## San Francisco Amateur Astronomers Membership Application

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



Information Hotline: (415) 289-6636

Web Page: [www.sfaa-astronomy.org](http://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.