

# ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 48, No. 10 – October 2000

**Paul Mortfield**  
**Guest Speaker, General Meeting, October 18**  
*“The Good, the Bad, and the Fuzzy”*

San Francisco  
Amateur Astronomers



Sharing the Wonders  
of the Universe



**Information Hotline**  
(415) 566-2357

**Web Page**  
<http://www.zennla.com/sfaa>

Paul loves making astrophotographs. His images have appeared in books, in magazines, in advertisements, on television and on the Internet. Paul works at the Stanford SOLAR Center producing Education and Public Outreach resources as part of the SOHO spacecraft mission studying the Sun. He is also the host of the NASA Webcast Series 'All about the Sun' and appears on KPIX-TV reporting on astronomical events.

Paul will talk about the journey and excitement of 30 years (I don't really think he's that old) in making astrophotographs. The talk will be illustrated with successes as well as bloopers and lessons learned along the way. The talk will be informative to both the beginner and the seasoned pro.

If you have ever wanted to record a comet, an eclipse, a grazing lunar occultation of the planet Saturn or another sky event then you don't want to miss this captivating talk by this very entertaining speaker. So show up on October 18<sup>th</sup>, be entertained and learn some things as well.

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**Fraser Reich**  
**Speaker, City Star Party, October 7**

Fraser Reich has a bachelor's, master's and also a doctorate in Science, but still knows bugger-all about anything, really. Gazing up at the heavens merely confirms this to him. He had lived most of his life in the U.K. until fame and fortune beckoned him out to the West Coast of the U.S. ten years ago. He found neither, but did decide it was nice here, settled, bought a house and started a family. He re-discovered a childhood interest in astronomy when his (then) three year-old son wrote to Santa Claus and asked for a telescope for Christmas. For a day job, he earns his crust of bread at the opposite end of the scientific scale, doing research and development in atomic and molecular mass spectrometry, and claims that astronomy as a hobby takes his mind off 'small things', like atoms and bank balances. His interests include the history and philosophy of science, as well as practical amateur astronomy.

## SFAA Officers 2000

*President* Al Stern  
(510) 728-1851

*Vice-President* Bill Stepka  
(415) 928-2367

*Secretary* Renita Mock  
(415) 566-2357

*Treasurer* Chelle Owens  
(415) 479-5313

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### Subscriptions & Membership

Chelle Owens (415) 479-5313

### Bulletin Editor

Lorrie Boen (415) 921-1432

### Telescope Loans

Ray Cash (415) 665-8666

## SFAA Website Update

For those of you with online access, don't forget to visit the club's website. The bulletin board area especially is a great place to post info and ask questions. Go to <http://www.zennla.com/sfaa>.

*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](mailto:LorrenLee@aol.com).

## Club Telescopes



Long time member Ray Cash-LePennec has 3 loaner telescopes for club member use and is in charge of loaning them out. If you are interested in borrowing a club telescope, give Ray a call. There are many new members in the SFAA and they ask what kind of telescope to buy or use and this is a good way to get to know the Dobsonian type of scope and learn the sky as well.

## CLUB DATES

### **Board Meeting – October 11**

7:00 p.m. Western Addition Library – corner of Scott & Geary Sts. SF

### **SFAA General Meeting – October 18**

Refreshments and conversation at 7:00 p.m.

Speakers begin 7:30 p.m.

Morrison Planetarium, Golden Gate Park

### **City Star Party (last of 2000)**

October 7 at 6:30 p.m.

### **Mt. Tam Star Party**

September 30 at 7:30 p.m.

October 28 at 7:00 p.m. (last of 2000)

## From the President

Our August star party at Mt. Tam was another huge success. All of us had a good time. The weather was definitely on our side as the fog that covered 'the city' made the Milky Way really stand out and made for some good observing. We had over 25 scopes there of all shapes and sizes. The range of telescope viewing expertise was very diverse as well. We all had fun working with each other to find things and I think that everyone learned something new or looked at something that they hadn't seen in a long time.

I am excited about Paul Mortfield being our guest speaker on October 18<sup>th</sup>. His down to earth comments on taking astrophotography will be a refreshing lesson on how to and how not to do it.

Our first 'during the meeting' social at the August meeting was a real success and we will be trying different things to find the best chemistry for it. There were lots of good comments about it from a number of people.

Finally, the elections for club officers and board members will be held at the General Meeting on December 20. If you are interested in running for office, please contact one of the current SFAA officers listed on page two. Nominations will close on October 31<sup>st</sup>.

### **John Dobson's Fall 2000 Class in Marin County Cosmology for Children under 80 (and their elders)**

John Dobson, founder of the San Francisco Sidewalk Astronomers will be teaching a course this fall in Marin County at St. John's Church on Lagunitas Road in Ross, CA. The course is designed to acquaint budding astronomers with the universe in which they live and to help them understand the nature of the real world, matter, energy, space and time.

John is best known for founding the Sidewalk Astronomers (which now has chapters worldwide) and for developing the Dobsonian reflector telescope. Now 85, Dobson's zeal for informing the public about earth's origins and the nature of the universe is as strong as ever. As one recent journal article notes:

"With the sky as his ministry and cosmology his gospel, celestial evangelist John Dobson has been preaching astronomy to the public for more than forty years. His presentations are both informative and provocative."

The class will run from October 3rd through November 28, 2000. The fee is \$75.00 (all of which goes to allow John Dobson to continue to teach.) For more information, contact Philip Rice at (415) 454-6195 or send e-mail to: [prsfca@circlelimit.com](mailto:prsfca@circlelimit.com).



Morrison Planetarium's  
**Benjamin Dean Lecture Series**  
*presents*

Astronomy in the New Millennium

**26 September**

***Hubble Space Telescope: A Decade of Discovery***

With the Hubble Space Telescope the Universe snapped into sharp focus, both visually and in the minds of astronomers. View spectacular images and learn how they are revolutionizing our understanding of the Universe.

Ray Villard, Space Telescope Science Institute

**17 October**

***Mining the Sky: New Astronomy with a Virtual Observatory***

How will the vast amounts of information being collected in digital sky surveys change the techniques of astronomical research and public access to results?

Dr. Robert Brunner, California Institute of Technology

**7 November**

***Hyperspace, Time Machines, Wormholes, and the Theory of Everything***

Physicists are closing in on that one equation that will explain everything about time and space before the Big Bang to the ultimate fate of the Universe.

Dr. Michio Kaku, City College of New York

**12 December**

***Millenium and Astronomy – Past and Future***

The idea of cyclic time, with ages being signaled by spectacular cosmic happenings will be traced through past cultures and projected to the future.

Dr. Anthony Aveni, Colgate University

**23 January**

***The Blind Leading the Seers – Science Fiction and Science***

Science fiction is immensely important to science by getting young people hooked on science as a career and by keeping the public interested.

How do SciFi writers go about their craft?

Joe Haldeman, MIT

All programs begin at 7:30 p.m. in the Planetarium

Tickets are \$3.00 each

DEAN LECTURE INFORMATION LINE at (415) 750-7141



# Mt. Tamalpais State Park Astronomy Programs

*Lectures held in the Mountain Theater  
Observing is in the Rock Springs Parking Area*

## **September 30 at 7:30 p.m. - DR. LYNN ROTHSCHILD**

Research Scientist, Ecosystem Branch, NASA-AMES RESEARCH CENTER

"The Sun, the Moon and the Algae" Evolution is influenced by the physical environment, including extraterrestrial factors. What was the roll of the Sun and the Moon on the development of life?

## **October 28 at 7:00 p.m. - DR. ROCCO MANCINELLI**

Senior Research Scientist-SETI INSTITUTE

"Life's Expansion Beyond its Planet of Origin"

What is the potential for survival, adaptation, and biological evolution of life beyond the home planet?"

A no-host dinner with the speaker will be at Lau's China Bistro, 224 Almonte Boulevard (Tam Junction), at 5:00pm. Call 415-389-8868 and add your name to the "Mt. Tam Party" if you wish to join. (Cost is \$10-15 including tax and tip, depending on the number of attendees and the menu.)

Information: (415) 455-5370, (415) 388-2070

Same Day Hotlines: (415) 566-2357, (415) 455-5370 (messages after 4:00 p.m.)

Address: MTIA/Astronomy Programs, PO Box 3318, San Rafael, CA 94912

If you are a Mt. Tam volunteer, please call in your hours to Bridget Mason at (415) 361-6527

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# CalStar 2000

## **California Unified Star Party September 29-30, 2000**

The California Unified Star Party (CUSP) is a new event. This year, it is only for telescopic observing (and imagers). There are no lectures, prizes or vendors. If this first CUSP proves successful, we may expand the number of nights, and include other attractions next year.

Please see [www.astronomy-mall.com/calstar/](http://www.astronomy-mall.com/calstar/) for more information. Or go to The Astronomy Connection (TAC) website at [www.observers.org](http://www.observers.org) for a link.

Behavior guidelines will be posted on this site shortly. These will be comprised of the usual common sense star party etiquette suggestions practiced by regular dark sky observers.

### **For Sale**

Unassembled AstroSystems Telekit cut for 14.5" f/5 mirror blank. No optics included. (I ended up using the mirror in another project.) Available now for pick up in Campbell. (Information about AstroSystems Telekits: <http://www.ezlink.com/~astrosys/>) \$900 Morris Jones (408) 836-4300 [mojo@whiteoaks.com](mailto:mojo@whiteoaks.com).

**ASTRONOMER DAVID MORRISON TO TALK AT FOOTHILL COLLEGE**  
**"WHAT KILLED THE DINOSAURS: THE ASTEROID THREAT**  
**AND WHAT WE CAN DO ABOUT IT"**

On Wednesday evening, October 11, at 7 pm, Dr. David Morrison, of NASA's Ames Research Center, will give the first talk in the 2000-2001 Silicon Valley Astronomy Lecture Series, at Foothill College. Admission is free and the public is invited.

Dr. Morrison will discuss asteroids and comets that come close to the Earth and occasionally can hit our planet -- sometimes with disastrous consequences. Such an impact probably killed the dinosaurs (and close to half of all living species) 65 million years ago.

Dr. Morrison will discuss the new efforts to catalog all "near-Earth asteroids" and describe national and international discussions about what we can do if we see a large asteroid heading our way. Several recent Hollywood films have dramatized such efforts, but not always with sterling scientific accuracy. Come hear the real story behind the science fiction, from the astronomer who has received a medal from NASA for helping to protect the Earth from the asteroid threat.

The lecture will be held at the Foothill College Smithwick Theater in Los Altos Hills. From Interstate 280, exit El Monte Road and travel west to the campus. Visitors must purchase a required campus parking permit for \$2. For directions and information, call the series hotline at (650) 949-7888.

The non-technical program is cosponsored by NASA's Ames Research Center, the Astronomical Society of the Pacific, and the SETI Institute. Over 900 people attended several of the lectures in this series last year. Seating will be on a first-come, first-served basis. Children over 13 are most welcome.

A unit of Foothill College credit is available to people who attend all six lectures over the course of the school year and write a short paper. Registration materials will be available at the door. Dr. Morrison is Chief of Space Science and Astrobiology at NASA's Ames Research Center and an internationally renowned space scientist, specializing in the small bodies of our solar system. He has served on the scientific teams of several planetary missions, such as the Galileo spacecraft orbiting Jupiter. Dr. Morrison is co-author of several astronomy textbooks, including "Voyages to the Universe," and has also written a number of popular books explaining astronomical ideas for the public. The International Astronomical Union has named Asteroid 2410 Asteroid Morrison to honor his many contributions to science.

**Grand Opening Celebration at Lumicon**

A long time standard in the Northern California astronomical community is proud to announce a grand opening celebration at its new location, 6242 Preston Avenue in Livermore, California. The grand opening will take place on October 21st, 2000 from 10 am to 3 pm. Refreshments will be served, the latest telescopes will be on display and there will be great in-store discounts on select products. Lumicon started as the brain child of Dr. Jack Marling in 1979. Since that time Lumicon has developed cutting edge light pollution filters, guiding systems for astrophotography and digital setting circles. On October 1, 1999 Dr. Marling sold Lumicon to a group of its long time employees. Now with this move to our new larger more modern building Lumicon Inc. has set its sights on becoming the premier telescope, spotting scope and binocular store in Northern California. We invite everyone to come see our big beautiful showroom and talk to our outstanding staff. Call for more information: 925-447-9570.

**Galileo Galilei: The significance of his ground-breaking 1610 work "Starry Messenger", and the price he paid for providing the evidence that would finally demolish the old, earth-centered view of the heavens**

**Fraser Reich  
San Francisco Amateur Astronomer**

Copernicus published his masterwork "De Revolutionibus Orbium Coelestium" in 1543. It challenged the earth-centered view of the universe that had been held for nearly one and a half millennia since Ptolemy published what has come to be known as "The Almagest" in circa 140 A.D. Fear of reprisal led Copernicus to publish only when he knew he was safe from threat, i.e. as he lay on his deathbed. When Galileo first turned his home-made "perspicillum" to the heavens in 1609, he was already sympathetic to the Copernican view of the universe. However, contrary to popular understanding today, Copernicus' theories predicted planetary positions with as many errors as those produced by the Ptolemaic model, and there was little or no practical evidence to persuade people to adopt the new, sun-centered model of the universe. Galileo observed many phenomena, and understood that these observations provided just that proof.

He observed, theorized and published, and quickly at that. He is, in many ways, one of the first pioneers of the modern scientific method. His book was an immediate success and brought him much attention, both welcome (from curious astronomers all throughout early 17<sup>th</sup> century Europe), and unwelcome (from the Catholic Church, which had made an earth-centered universe part of church dogma). In a move that would become characteristic of many future generations of scientists, he naively miscalculated the political forces that dominated at the time, and continued to speak boldly about his observations, believing that 'the truth' would win out. Eventually, he was forced, under threat of torture by the inquisition, to renounce his beliefs in 1633. He spent the last nine years of his life under house arrest, where he was allowed to see no-one except his daily helpers. Nonetheless, despite the desperate attempts by the Church to suppress his ideas, his work continued to influence those who followed. Isaac Newton was born 11 months after Galileo died. Eventually, Newton would remark "If I have seen farther than other men, it is because I stood upon the shoulders of giants". Indeed.

**Astronomical Equipment Sale**

The Mt. Diablo Astronomical Society will hold its annual sale, swap and auction meeting on October 24. This year it will include many items from the estate of Owen Durden, owner of The Odd Assortment. Owen, a well known Bay Area amateur astronomer, turned his hobby into a full time profession, widely recognized for its odd assortment of just about everything. He died unexpectedly at his telescope atop Mt. Diablo just over a year ago. His estate is now inventoried and ready for sale.

You are welcome to bring other items for sale or trade. Doors open: 7:00 pm. Sale begins: 7:30 pm.

Location: Concord Police Training Facility on Avila Road. Avila is off Willow Pass Road at the Route 4-Willow Pass junction. You can also take Willow Pass Road from Route 680. Contact: Jim Scala (925) 283-2753

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:**

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Email address:

\_\_\_\_\_  
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Name: Telephone:

## **San Francisco Amateur Astronomers Membership Application**

### **San Francisco Amateur Astronomers**

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

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#### **In This Issue of SFAA's Above the Fog**

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