

Vol. 55, No. 8 - August 2007

# September 19, 2007 – General Meeting 7:00 pm Doors Open . 7:30 pm Announcements . 8:00 pm Speaker

# CHRIS FORD PIXAR ANIMATION STUDIOS' RENDERMAN BUSINESS DIRECTOR

## ASTRONOMY VISUALIZATIONS

Astronomy and the art of astronomical visualization have always been closely linked. The traditional paintings of artists such as Chesley Bonestell, Don Dixon, or Ron Miller are well known and have educated and inspired millions.

Since the early 1980's, traditional techniques of illustration have increasingly been replaced as a medium of education by computer generated imagery. (CG) This process has advanced to the point that is now rare to see traditional paintings in the astronomical media. The additional dimension of animation also broadens the visual possibilities available to communicate the latest data and research.

The increasingly photo-realistic quality of the CG medium has largely been driven by the demands of Hollywood computer generated special effects and animation. The same technology used to create alien landscapes in Star Wars or Star Trek can just as easily be used to interpret real scientific data in a manner that both explains and entertains. Today it is now possible to create astronomical simulations from scientific data that are so photo-realistic that in immersive projection environments such as Imax, it is possible to believe you are "really there".

Chris Ford is currently the RenderMan Business Director at Pixar Animation Studios and over his career has managed some of the most important CG software tools used in photo-realistic CG astronomical visualization including Maya, 3ds max, Dynamation, and RenderMan.

#### **2007 CLUB OFFICERS & CONTACTS**

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Members		astronomy.net
	Lon Carter	
Webmaster	Joe Amato	Web-master@sfaa-
		astronomy.net
		~

#### **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 pg@lbin.com 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 president@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/agabrielli-sfaa@sbcglobal.net
- 7) 8" f/10 Meade SCT/Stefanie Ulrey/treasurer@sfaa-astronomy.org
- 8) 9.5" f/5.6 Celestron Newtonian/Ken Frank/kennethfrank@planitarium.net

#### **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/ttc/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 <u>sfaa-astronomy.org</u> is provided to our members and the general public for the sharing of club information and services. The web site contains links for club <u>star parties</u>, <u>events</u>, <u>newsletters</u>, <u>lectures</u> and <u>meetings</u>. If you wish to interact with other people who are

interested in astronomy, the SFAA web site offers public and members only <u>bulletin board forums</u>. If you wish to remain up-to-date on club activities, then we encourage you to subscribe to one or both of our public <u>mailing lists</u>, 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 <u>observing location reviews</u>, member <u>astronomy photos</u>, and <u>members only telescope loans</u>. Information about SFAA's membership, organization and by-laws are available at the club's online public document <u>archive</u>. If you need to contact a representative of the SFAA, then please visit our <u>contacts</u> 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.

## **IMPORTANT DATES**

## **SFAA GENERAL MEETINGS & LECTURES**

Wednesdays - September 19, October 1, December 19 NOVEMBER MEETING CANCELLED

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 - September 11, October 9, November 13 7:00-8:30 p.m. Randall Museum, 199 Museum Way (Near 14th Street and Roosevelt)

## Fall Astronomy Day

The SFAA will observe Fall Astronomy Day on both Saturday, September 22nd at the Randall Museum and Saturday, and really kick this event off on September 29<sup>th</sup> at the College of San Mateo for the AANC Conference entitled "Reach for the Stars"

## MT TAM STAR PARTIES - SPECIAL USE PERMIT - MEMBERS ONLY

SATURDAYS -- September 8, 3:00 P.M. - ANNUAL STAR-B-QUE - BOOTJACK CAMP
7:21 p.m. MEMBERS ONLY STAR PARTY Gatekeeper VOLUNTEER NEEDED

October 13, 6:29 p.m. – Gatekeeper VOLUNTEER NEEDED

November 10, 4:26 p.m. – Gatekeeper VOLUNTEER NEEDED

## CITY STAR PARTIES - Telescope Clinic one hour before sunset

## **VOLUNTEERS ARE ALWAYS NEEDED**

Saturday, September 22, 7:00 p.m. at Randall Museum Saturday, October 20, 6:19 p.m. at Land's End (Point Lobos) Saturday, November 17, 4:51 p.m. at Land's End (Point Lobos)

Weather may cancel the City Star Party. Call the SFAA Hotline at (415) 289-6636 AFTER 4 PM to learn the status of the event and the location. If the hotline announces the Star Party is cancelled, the Telescope Clinic and Lecture are cancelled as well. However, if the Hotline does not cancel the Star Party, be assured that the Lecture will proceed as scheduled even given less-than-perfect telescope conditions.

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

## **FOCAL POINT**

I missed mentioning in last month's column: added to the list of volunteers for "Reach for the Stars" are the Mahan's, who are donating specially-made, astronomically-themed jewelry as well as making the speaker certificates, so make sure you buy some raffle tickets.

If you're participating in "Dob Day Afternoon" on September 29th with your scope, or would like a volunteer position, please e-mail volunteers@aancstars2007.org Also check out the cool "Reach" mug, commemorative pin and T-shirts that are for purchase on the website. Register today for a guaranteed seat in the super new Planetarium. Professor Darryl Stanford will wow you with the innovative projector system. There may be many amateur and professionals alike that aren't listed as speakers but were invited to the conference. You never know who you might meet. That's what the AANC is all about; bringing together like-minded people as a platform for exchange. For those of you who don't know the vehicle the AANC provides: ASTRONOMY DAY-AANC created this event in 1973 a worldwide celebration of astronomy including in your local area. Promotion of MESSIER Marathon Star Parties — Try to find all 110 Messier Objects in a single night. AWARDS -Annually, we choose an AANC Amateur, Commercial, Professional and Special Individual of the Year, honored for enriching the activities of amateur astronomy in Northern California. SPECIAL EVENTS — AANC helps coordinate special activities related to unusual celestial occurrences such as comet viewing, close approaches of Mars, occultations, eclipses, spacecraft encounters -- Voyager, Galileo, Cassini, ASTRONOMICAL CONFERENCES etc. and WORKSHOPS — Which serve to provide opportunities to learn more about astronomy via talks, lectures, demos, etc. ANNUAL STAR-B-QUE — Each year AANC holds a Star-B-Q, usually at Fremont Peak State Park, where we present our Annual Awards, hold a gastronomical contest, give out door prizes, and enjoy a weekend of observing fun. REGIONAL STAR PARTIES — Enjoy exciting observational astronomy at a dark sky site. OK, you get the picture, I envite you to come support the AANC for a worthy cause: http://aancstars2007.org/register.shtml

As a reminder, if you haven't sent in your SFAA dues, please do

We need a speaker for the City Star Party at the Randall on Saturday, September 22<sup>nd</sup>. If you want to volunteer, please let me know.

Mount Tamalpias Supervising Ranger, Laura Wong, approved our 2008 Member's Only Special Use Permit dates. They are every New Moon Saturday before the Public Star Party.

Our Annual SFAA StarBQ is Saturday, September 8<sup>th</sup>, at Bootjack. Thanks to the State Park Service, there will be no charge; just make sure your SUP placard is visible on your dash. This year's StarBQ will be extra special, we're hosting the newly formed College of Marin Astronomy Club.

Our synergy bodes well for a chance to make observing on the West Peak a possible reality. Let Vivian, our treasurer, vivwhite at <a href="mail.com">gmail.com</a> know that you are coming, please. Side dishes & astronomical-gastronomical delights appreciated and readily consumed. If you'd like to volunteer for VIP training so we can enjoy future star parties and free use of Bootjack picnic area on Mt. Tam, let me know and I'll sign you up.

At our last SFAA membership meeting at the Randall I announced that I wouldn't be running for president again. I'll still be involved in the Club, but need to concentrate on other areas of my life. So start thinking of (and stepping up to volunteer for) an officer or board position.

Some very exciting news: Suzy Gurton, Astronomy Education Manager at the Astronomical Society of the Pacific will administer a questionnaire designed by the Institute for Learning Innovation (ILI). http://www.astrosociety.org/stu/index.html The ILI is recognized as leaders in what is called "Free Choice Learning." Currently the ILI is working on the actual survey. Suzy feels it may be available as soon as next month. Why a survey? As I mentioned in last month's Focal Point, during Sun, Wind, Water Day at the Randall, I had time to exchange ideas about astronomy clubs in general and, of course, the future of SFAA with Suzy Gurton. Board member, Élan Morpurgo, came up with the idea of a questionnaire to boost morale and engage the membership. I'm thrilled at the idea of our being a test case for the ASP study group!

Don't forget the free Planetary Society meeting at the Randall Wednesday, September 26,  $7:00\ p.m.$ 

See you above the fog --

KEN FRANK President

## 2007-2008 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.

<u>During this first year of transition</u>: If your present membership runs past June 2007, just pay a prorated fee to extend your membership to June of 2008. Simply deduct 1/12 from this year's dues for each month already paid. For example, if you last paid your membership in September of 2006, you have a credit of three more months. Subtract 3/12 (1/4) from your annual fee and just pay that amount. We trust your math. Next year, and every year thereafter, everyone will pay only in June. Easy!

We realize this conversion process may be a bit confusing and more work for some. But this is a one-time transition and it will lessen the work and confusion for all the years to come!

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 <u>local telescope retailers</u>
- 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

## CHASING GRAVEL: THE PERSEID TRIP

Kenneth Frank (More photos)



After answering last minute emails I took off for Oakland to have my adventure begin with Richard and Becca Ozer. Two years ago, we went to the Riverside Telescope Maker's Conference that really wasn't in Riverside but at Camp Oaks in Big Bear. But back to my main idea. We were to meet friends at Denni and Kevin Medlock's. The only real slowdown that earthmoving Friday was major equipment on Hwy 229, on our way to Fall River Mills. We stopped for brunch earlier in Winters at Gabbino's restaurant and deli.

Many SFAAer's flocked to the Lassen area that weekend to flee the Bay Area's sky glow from Mineral to Almanor.

Now in Syskiyou County we arrived at the Stars End Ranch owned by Kevin & Denni Medlock. Kevin had disked the field where we set up and observed. This was a conjunction of Denni & Kevin's friends from many moons gone by. Besides race horses they'll be nurturing an observatory probably sometime next year. A group of dedicated observers and telescope tinkerers was the norm here. From Dahl Kirkham's two truss tube beauties graced their property. Prior to our fine BBQ dinner complete with tasty baked beans and homemade apple pie.

Kevin proudly displayed his TMW membership card with Dennis Steele's name printed on the bottom. Yes, he was founder of the well established East Bay optical institution. Many have and will go on to greatness in the field of optics. Kevin began his career at the Telescope Makers Workshop. Around that time Denni was given a telescope kit. During those days it seems like there were as many telescope manufactures the East Bay as there was in the heyday of piano builders.

To start our observing session some Friday night grazers were apparent, but not the show we expected. The next day we took off for a secret observing destination that may be a future summer venue. After setting up our equipment and tents we were treated to a wonderful barbeque by Aaron and family. That night we reciprocated by holding an impromptu star party picking out some prevalent Milky Way objects and Jupiter of course. The Perseids did not disappoint. Every 90 seconds to two minutes we were greeting with, "there" and over there...wow!" by Becky and myself while sitting amidst the expanse of cattle grazing range land. The Milky Way popped out with as Richard and I commented said, "lots of relief". We calculated Mag 6.7in area 11 between Corona Borealis and Bootes around 11 pm. My view of Mt. Shasta was framed by the tent window; I had to leave it open all night to catch those pieces of gravel entering our atmosphere.

During the day we ventured to Burney Falls. Don't miss the State

Park if you're in the Lassen area with great views and a spectacular place to

cool off. I met the interpretive ranger who was last working at Mt. Tam of all places. We stopped in the town of Adin
for a photo op and gas and returned via 395 to 80. Would I recommend this spot for a star party? You bet. Ken

## **ASTRONOMY LITERARY CONTEST COMING SOON !!!**

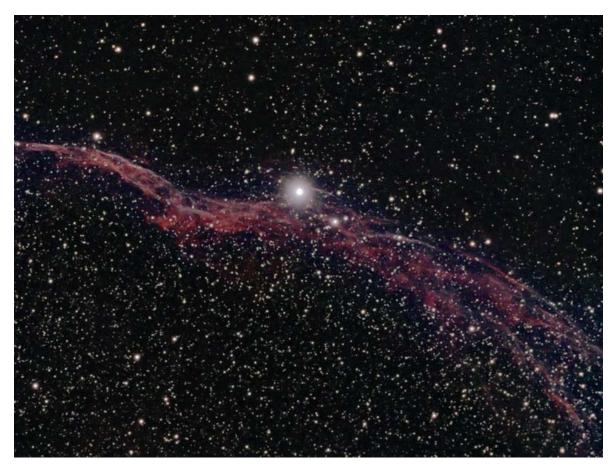


Time to sharpen your pencils/boot up your computer and get those composition juices flowing! If you have an interesting astronomy-related original short story to share, now is the time to begin writing. Submissions may be fact or fiction, humor or opinion. You may have a favorite story about an observing experience, a trip, or about people who have crossed your astronomical path in one memorable way or another. Share the stories of your astronomy observing and/or travel experiences, enable us to appreciate them with you and enhance our own appreciation of the amazing and endless interest of astronomy. Prizes for first, second and third place winners will be awarded at the December Member's Night meeting. Watch the SFAA web site and the newsletter for forthcoming details to submit your entry!

## **ASTROPHOTOGRAPHY CONTEST COMING SOON !!!**

Photos entries will be due prior to December 20th.

See what you can do on a SFAA public viewing night from Mt. Tam at Rock Springs?? This photo was taken at an SFAA Mount Tam public viewing by Jared Willson on August 18. Incredible!



Taken by SFAA Member Jared Willson - The western end of the Veil Nebula known as NGC 6960 but less formally as the Witch's Broom Nebula





## AANC-CON 2007

## SEPTEMBER 29, 2007 • CSM CAMPUS

1700 West Hillsdale Boulevard, San Mateo CA

Noon - Midnight



Hosted by San Mateo County Astronomical Society & College of San Mateo Sponsored by AANC. This year's theme: "Reach For The Stars." We all look forward to a great conference!

Speakers include: Jane Houston-Jones- "Cassini Mission Outreach" Lynette Cook- "Visualizing what it's really like out there." Dr. Pamela Gay- "What's New in Astronomy" (live video/audio feed) Vivian White-ASP "Night Sky Network/Project Astro"

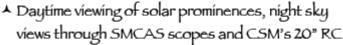
## KEYNOTE SPEAKER: Imke de Pater - Planet Discoveries with images by Christopher Go





Activities: A Planetarium shows by Professor Darryl Stanford







- ▲ Astro Vendors / Raffle!
- ▲ AANC Awards
- ▲ Mirror Grinding Chabot Telescope Makers Workshop
- KCSM-FM / CSM Astro. Dept. "Jazz Under The Stars"
- ▲ ASP Hands-On Astronomy Activities









For registration and other information visit: <a href="http://www.aancstars2007.org/">http://www.aancstars2007.org/</a>

The AANC acts as a forum for communication to the Astronomy Community, funds public outreach events, and provides seed money for educational programs. We invite everyone to AANC-Con 2007!



## WORLD ASTROCAST, FEATURING JOHN DOBSON

## From Michael Portuesi

"International support for World AstroCast"

In addition to the British Astronomical Assn. (UK) and the Society for Popular Astronomy (UK) providing support for World AstroCast the Astronomical League (USA) has also agreed to assist in this world first by circulating amongst its members notification of the event. Other national organizations have been contacted and are expected to follow suit. An all star speaker lineup is being programmed for the first World AstroCast. Scheduled for 13th October 2007. Up to 22 recipient sites worldwide will be able to take part in the first live amateur astronomer video cast.

Currently the following high-profile speakers have agreed to participate Stephen J. O'Meara, John Dobson, Martin Ratcliffe, Phil Harrington, Tom Boles. A total of nine celebrity speakers are being recruited. The event is being hosted by the Northamptonshire Natural History Society –Astronomy Section (UK). It is intended that there will be simultaneous translation in to four languages. Countries participating will be Australia, New Zealand, India, Spain, France, Germany, Italy, United Kingdom, Ireland, USA, Canada. It is expected that between 1000 to 2500 amateurs will be participating in the event. The programme starts at 08-00hrs UT and continues till 20-00hrs UT on the 13th October. This is all part of the 50th anniversary celebrations of the founding of the astronomy section in the Society.

For more information please contact Michael Finney (NNHS Astronomy section)
Telephone number +44(0) 121 378 5068, email nnhs\_astronomy@yahoo.co.uk,
SKYPE address michael.finney1

## Address:

Northamptonshire Natural History Society The Humfrey Rooms,10 Castilian Terrace, Northampton, NN1 1LD, England Web address www.nnhs.info

## Background

The Northamptonshire Natural History Society was founded in 1876 by George Claridge Druce - a leading botanist of the day. The first meeting was held in the Council Chamber of the Guildhall in Northampton and was chaired by Lord Lilford, the great Victorian ornithologist. Lord Lilford went on to serve as President of the Society from 1876 to 1896.

From the very beginning, the Society welcomed naturalists and scientists from all walks of life. Social, political and theological barriers were breached, and the membership included working men and women, clerics, businessmen, lawyers, doctors, architects and others of the 'professional' class, and such eminent names as Earl Spencer, Charles Darwin, Thomas Huxley, Joseph Hooker, Nathaniel Rothschild, Sir Herewald Wake, V.D. Cary-Elwes and Lady Knightley of Fawsley.

The Society - now in its 131st year - continues to promote interest and research into natural history and allied sciences, especially relating to Northamptonshire, and consists of a number of Sections dealing with archaeology and history, astronomy, geology, natural sciences and photography.

## SFAA ANNUAL BOOTJACK STAR-B-Q Saturday September 8, 2007



This is the biggest opportunity during the late summer months for members to meet, greet, eat, and retreat to dark skies. Our annual Star-B-Q will be held at Bootjack Campground on Mt Tam.

The Star-B-Q starts in the afternoon with a picnic. SFAA supplies the basic main course protein (hamburgers, hot dogs) - you bring whatever you like to drink and share. Immediately following, the group repairs to our Rock Springs permit area behind locked gates for a night of members-only stargazing.

Let Kenneth Frank at *kennethfrank at planitarium.net* know if you're coming by September I<sup>st</sup> (with Bootjack in the subject line) -- and please show up this time! With that said, if you need to cancel let John know for obvious reasons, like having six months' worth of hot dog buns in my freezer! Thanks, Ken





MT. TAM ASTRONOMY PROGRAMS
MT. TAM MOUNTAIN THEATER
MT. TAMALPAIS
SEPTEMBER 15 - 8:-00 P.M.

# JOHN DILLON, Science Curator, Randall Museum WHEN ASTRONOMY BECAME A SCIENCE

John Dillon is science curator of San Francisco's Randall Museum and lecturer at UC Berkeley and Santa Cruz Extensions. He has studied history and philosophy of science at Cambridge University, is a member of the History of Science Society and a past president of the San Francisco Amateur Astronomers. His talk will examine the amazingly sophisticated astronomy that flowered more than 2000 years ago at the legendary Museum of Alexandria.

The talk will take place in the Mountain Theatre at 8:00pm, followed by observing through telescopes in the Rock Springs Parking lot, weather permitting, until about 11:00pm. This program is FREE and open to the general public and families and students are encouraged to attend. Dress warmly, it can get cold, and bring a flashlight. Car pool if possible as parking is limited.

If the weather is questionable on the event day, call the hotline 415-455-5370 which is updated (if there is a change) after 3:00pm. The lecture usually takes place even if observing is doubtful. Only full rain or mountain closure due to fire danger cancels the entire event.

These programs are sponsored by the Mt Tamalpais State Park, organized and run by the Mt Tamalpais Interpretive Association. More information at www.mttam.net.

Telescope viewing will follow the program until about 11:00pm in the Rock Springs Parking Lot, courtesy of San Francisco Amateur Astronomers.

Thank you for your interest in the Mt Tam Astronomy Programs. See you on the Mountain!

Coming .....

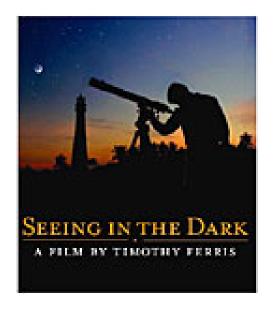
October 13 – 7:30p.m. Dr. Steve Stahler UC Berkeley

## **HOW STARS ARE MADE**

Stars are the natural outcome of processes that occur throughout galaxies. Research has led to a good understanding of the basic evolutionary process, but deep mysteries still remain.

# SEPTEMBER 19 – 8:00 P.M. "SEEING IN THE DARK," AMATEUR ASTRONOMERS IN HDTV

Michael Portuesi



Seeing in the Dark, a visually stunning HDTV documentary on the rewards of first-person, hands-on astronomy -- will air Wednesday, September 19 at 8:00 p.m. over PBS stations nationwide (check local listings). A locator for PBS stations is available on the home page at www.pbs.org.

Here in the San Francisco Bay Area, you can watch the program on KQED channel 9 (Comcast 709 for High Definition). Though the program is broadcast in High Definition, it is also broadcast in Standard Definition so you don't need an HDTV to see it.

From KQED 9 Duration: 56:46 CC Stereo DVS TVG

Hosted by Timothy Ferris ("Life Beyond Earth") and based on his book, the program explores the world of amateur astronomy, profiling some of

these nonprofessionals who stare into space out of wonderment and end up making discoveries about comets, planets and the galaxy. It examines the growing field of amateur astronomy, where new technologies have allowed beginners to see as much of the cosmos as the professionals.

#### Channels and Air Dates

KQED Channel 9 (Tune to Comcast channel 709 or Broadcast Digital 9.1 for High Definition)

Wed, Sep 19, 2007 -- 8:00 pm

KQED Encore (Comcast Channel 189, Broadcast Digital 9.2. All Encore airings are Standard Definition)

Wed, Sep 19, 2007 -- 11:00 pm

Thu, Sep 20, 2007 -- 7:00 pm

Sun, Sep 23, 2007 -- 3:00 am

Sun, Sep 23, 2007 -- 10:00 am

Sun, Sep 23, 2007 -- 6:00 pm

Wed, Sep 26, 2007 -- 12:00 am

Wed, Sep 26, 2007 -- 4:00 am

Find more details about the show, as well as links to resources here:

http://www.astrosociety.org/seeinginthedark.html

Editorial Note:
This movie includes within its cast our very own
President, Ken Frank, and
Board Member, Robert
English!

## **S**eptember 26 – 7:30 p.m.

# RANDALL MUSEUM PLANETARY SOCIETY PUBLIC LECTURE "THE PHOENIX MISSION TO MARS TO BEGIN MARTIAN POLAR EXPLORATION"

You are invited to "The Phoenix Mission to Mars to begin Martian Polar Exploration". The Planetary Society and the Randall Museum are co-sponsoring an exciting and informative lecture on the launch of the Phoenix Mission to Mars' north polar region. The Lecture will be held on Wednesday, September 26, 7:30pm at Randall Museum Auditorium.

NASA's Phoenix Mars Lander will arrive at Mars in late May 2008. The lander's mission is to claw down into the icy soil of the Red Planet's northern plains. The robot will investigate whether frozen water near the Martian surface might periodically melt enough to sustain a livable environment for microbes. To accomplish that and other key goals, Phoenix will carry a set of advanced research tools never before used on Mars.

Chris McKay, Chair of The Planetary Society Advisory Council, is a co-investigator on the Phoenix mission. He has been actively involved in planning for future Mars missions including human settlements. He has also been involved with polar research since 1980, traveling to the Antarctic dry valleys and more recently to the Siberian Arctic to conduct research in these Mars-like environments.

Come join us on September 26th to hear what's in store for this exciting mission in search of life in our Solar System. For a map of Randall Museum Auditorium please click here.

For more info: Phoenix project -http://www.planetary.org/explore/topics/phoenix/

Dr. Chris McKay - http://ic.arc.nasa.gov/projects/sigma/mckay.html

Randall Museum -- http://www.randallmuseum.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.





## **MEMBERSHIP APPLICATION**

Membership is billed for each upcoming year on June 30. Between January I and June30, new members pay one half the amount listed below

\$30 Family

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\$10 Youth/Student

San Francisco CA 94115 **FOB 12097** 

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

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\$75 Supporting

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