

ABOVE THE FOG

• BULLETIN OF THE SAN FRANCISCO AMATEUR ASTRONOMERS •

VOL. 49, No. 2 – February 2001

Dr. Jeff Moore **Speaker, General Meeting, February 21**

San Francisco
Amateur Astronomers

We are pleased to announce that Dr. Jeff Moore will be our February speaker. The meeting is on February 21, 2001 at 7:30 PM.

Jeff's 6-year ongoing association with the *Galileo* SSI (imaging) Team has kept him 'in the know' on what is being found on the Galilean moons of Jupiter. From volcano's on Io to a possible ocean on Europa Jeff has been involved in analyzing the images that have led to the new information we know about all four Galilean moons. The moons have been studied by the Galileo satellite which has been doing loop d loop's around the four Galilean moons for several years now. His discussion of how the information was arrived at is fascinating.



Sharing the Wonders
of the Universe



Dr. Moore, who got his PH. D. in Geology from Arizona State University, Tempe, AZ, in December 1990, has recently been appointed Project Scientist of the NASA Astrobiology Research Laboratory, to be located at Ames Research Center.

For a look at Jeff's full bio, see it on our website (www.zennla.com/sfaa).

Fraser Reich **Speaker, City Star Party, February 24**

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.

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(415) 566-2357

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<http://www.zennla.com/sfaa>

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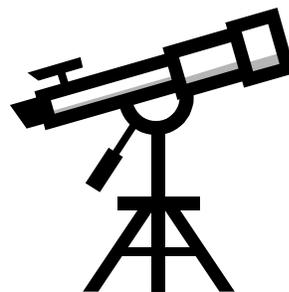
Ray Cash (415) 665-8666

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.

Club Telescopes



Long time member Ray Cash-LePenec 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 – February 14

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

SFAA General Meeting – February 21

Refreshments at 7:00 p.m.

Speakers begin at 7:30 p.m.

Morrison Planetarium, Golden Gate Park

City Star Party

February 24 at 6:00 p.m.

From the President

I would first like to thank the retiring board members; Joe Amato, Toney Burkhart, Mary Ann Levenson and Stacy McDermott; for their good work and valuable input to the club. The members leaving the board still have key roles in the club for which I am again grateful.

Jason Burkhart, Dan Christian, Fraser Reich, and Rita Nossardi Stern are the new members of the board of directors; and I look forward to their participation on the board.

The club officers; Bill Stepka, Renita Mock and Chelle Owens and the continuing board of directors; Lorrie Boen, Nancy Cox, and Dennis Tye, Randy Taylor, and James Webster should also be thanked for their contributions as well.

I am looking forward to hearing Dr. Jeff Moore, a member of the NASA/AMES Galileo imagine team, give a presentation on February 21, discussing the finds of the Galileo spacecraft fly-bys of the Galilean moons of the planet Jupiter. See this bulletin and the website for more information about Jeff and the presentation.

KQED

PLEDGE DRIVE 2001



KQED Pledge Night is coming in March 2001!!

**Mark your calendars for March when
SFAA spends another fun-filled
evening helping raise money to
keep KQED-TV's great programming
on the air.**

Day and time coming soon!

**Please contact the SFAA secretary at
(415) 566-2357, ext. 2
for more information.**



Spend an evening of fun, food and watching behind the scenes activity at the Bay Area's premier educational television station.

Public Viewing Nights
at the
Sonoma State University Observatory
FALL - WINTER 2000-01



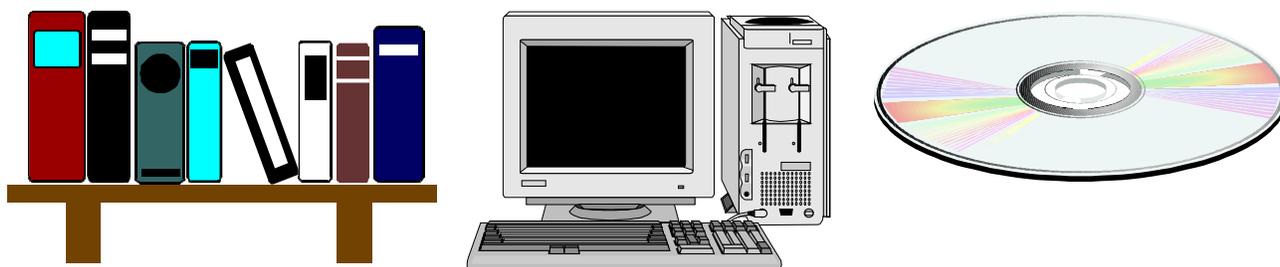
Friday evenings:

FEB 2 7:00 -9:00 Jupiter, Orion Nebula

The Observatory is located [inside the football field](#) at the SE corner of the campus. The [campus](#) is located at East Cotati Avenue and Petaluma Hill Road, 2 miles east of U.S. 101 at Cotati. Follow signs from the freeway to the campus.

Call before coming if it appears possible that clouds or fog may force cancellation: (707) 664-2267.

See the website at <http://www.phys-astro.sonoma.edu/observatory/pvn.html>



Have you seen...

...a great astronomy book?...a fabulous website?...software to die for?...an stellar observing site?

We want to know! If you have seen one of these, or anything else astronomy that you just can't live without, we would love to print your review!

Not everyone can surf the web or get to the store or even afford to buy all the goodies out there for eager amateur astronomers. So, if you have any recommendations, please share them with the rest of the club. Write a critique of the product/website and send it in. The editor's email and street address can be found on page 2, top right corner.

Please tell us what it is, where it can be found (url, store, etc.), what it covers and why you just can't live without it. The review can be from a few lines to about 350 words (1/2 a page or thereabouts).

The *Stargazer* Mutant¹

by Bert Katzung

A quote from Science magazine, 22 December 2000, page 2270: "The *stargazer* mutant mouse exhibits unusual head-tossing movements, an ataxic gait, and The *stargazer* mutation disrupts the 38-kD stargazin protein, which has four predicted transmembrane domains and is homologous to the gamma subunit of muscle calcium channels (4)."²

Finally, a scientific explanation! Clearly there must be a human variant of this mutation because I know a lot of people with peculiar behaviors that seem to be associated with stars. In the interests of medical science, I have applied the above information to observations that I have been making over the past three years.

1. Basic symptoms and how to diagnose the human *stargazer* mutation.

These humans, like the mouse model described above, develop a peculiar head twitch. In most victims, these twitches occur every month around the time of the new moon. The head is almost twitched directly up at the sky, often beginning at or near Polaris. These individuals (again, like the mouse) often develop ataxic movements after bending over an SCT eyepiece for 4 hours. Some particularly pitiful patients crawl around on the ground under a refractor for prolonged periods. They may often be heard muttering incoherent statements such as, "why does it always have to be at the zenith?"

Variants: As noted above, the human *stargazer* mutant behavior usually occurs at night around the new moon. However, careful observation reveals that the same (or similar) behavior affects certain patients during the day as well. This appears to be a variant mutation that I call *sol-stargazer*. Finally, there are a few victims of this disease who seem to suffer the most severe attacks during the *full moon*, rather than the *new moon*. These patients have been unfairly compared to the famous *werewolf* mutation, but are really much more numerous and more benign than that Eastern European condition. Furthermore, I have never observed any full-moon *stargazer* mutants growing long teeth or fur while using their bizarre devices. Therefore, these full-moon *stargazer* mutants are better called *luna-gazer* mutants and should always be strictly distinguished from *werewolf* mutants.

We can with confidence, therefore, specify the types of the disease as consisting of the basic *stargazer* mutation alone in the majority of subjects and associated in a minority with one or both additional mutations: the *sol-stargazer* mutation or the *luna-gazer* mutation.

The nature of the disease that results from these mutations appears to resemble drug addiction. That is, subjects repeatedly subject themselves to great discomfort in order to prevent withdrawal symptoms and to further satisfy their peculiar cravings. They have been known to expend amazing amounts of money and effort to obtain the necessary devices for satisfying their habit. Fortunately, the need for these devices, called *telescopes*, *eyepieces*, and *mounts* does not seem to stimulate antisocial and illegal activities such as robbery.³

A particularly pitiful manifestation of the disease may be noted when patients are prevented from satisfying their insatiable cravings by clouds, rain, Park Rangers, and other uncontrollable phenomena. Under these circumstances, the subject usually becomes withdrawn and depressed and will often be observed surreptitiously accessing some of his or her equipment, such as an *eyepiece*, and fondling it for minutes or even hours.

2. Natural history of the disease.

One must not assume that all persons who exhibit the head-tossing, sky-seeking behavior described above will go on to develop the full-blown, permanent *star-gazer* condition. Thus a person may be only briefly addicted and then turn away from the problem, just as some teenagers sample drugs and then think better of the terrible life that addiction leads to.

¹ © 2001 by Bert Katzung. Opinions expressed in this article are those of the author and not necessarily those of this organization.

² The article goes on to describe how studies of this mouse have yielded new insights into the transmission of nerve impulses in the brain.

³ However, rare instances of assault have been reported in the literature when the patient's addiction-satisfying equipment was directly threatened by another person.

However, it must be admitted that once seriously sampled, the bizarre satisfactions that the *stargazer* patient obtains from his nocturnal (or diurnal) activities are very nearly permanent addictions.

The disease may appear full-blown from the start, as in the case of middle-aged patients who go out and buy thousands of dollars worth of *telescopes*, *eyepieces*, and *mounts* immediately upon becoming aware of the craving. In other individuals, it may develop more insidiously. Such patients may tell their loved ones that they are "just going to get a small, inexpensive Dobsonian," and even hold to that promise (for a time).

Unfortunately, the *stargazer* disease is a progressive one in most victims. A particularly common sign of progression has been termed *aperture-fever* and leads to an inexorable increase in the size and expense of the devices needed to satisfy the habit. Thus, an apparently minor affliction that begins with a 6 inch Dob may end up with the patient requiring a 12 inch and finally a 20 inch instrument to satisfy his or her cravings. One can only pity the victim of such a condition.

Neither poverty nor advanced age seem to cure it, although these conditions may modify the patient's methods. For example, severe arthritis may cause refractor-addicted subjects to consider switching to Schmidt-Cassegrain devices.

3. Methods of treatment.

Like the treatment of drug addiction, slogans such as "just say NO to Naglers" and military campaigns attempting to root out all the small-time mirror-grinders hiding in Mendocino County have been spectacularly unsuccessful in dealing with *stargazer* disease.

I am therefore proposing a new and more humane method of treatment for these victims. After all, they do not become addicted of their own free will and through their antisocial attitudes! The breakthrough work in the mouse, quoted at the start of this article, proves that they are the victims of their genes!

My proposed treatment program will take two major forms. First, small group-therapy sessions will be set up around the country to help those who are willing to be helped. It has been shown that providing enticements, such as a promise of help in grinding a mirror, will attract the most susceptible individuals into such groups. Once engaged in these group-therapy sessions, a variety of aversive conditioning techniques such as scratching their nearly finished mirrors between sessions, or verbal abuse by the instructors, may be tried to wean responsive patients from their addiction.

Second, those unfortunate patients who do not respond to the above approach will be declared *disaster victims*. As disaster victims, they will become eligible for government subsidies to purchase the equipment needed to relieve their symptoms. Remember, even though there is little evidence that *stargazer* victims ever become violent,⁴ wouldn't it be better to eliminate every last possibility of such an unfortunate event? A mere 40 to 50 thousand dollar investment in equipment for each patient, renewed every two years, would allow these patients to live out their lives in quiet, dark places without disturbing the normal citizens in our society. Compared to the cost of the government's drug programs, my program would be ridiculously cheap!

¹ Rare exceptions appear to involve arguments about guns or politics since they are referred to as "the big bang" and "the red shift."

Astronomy Day 2001

Saturday, April 28, 2001

Morrison Planetarium, Golden Gate Park

MARK YOUR CALENDARS!!!

More details to come...

April 7th, 2001
Chabot Space and Science Center, Oakland
Northern California Astronomy Club Conference

April 7th is the date for the annual one-day conference sponsored by the AANC, the Astronomical Association of Northern California. This year the event will be held at the new Chabot Space and Science Center in Oakland. The theme this year, The Northern California Astronomy Club Conference, will showcase the astronomy clubs and give everybody the opportunity to exchange ideas and get to know each other.

Astronomy clubs from all over Northern California will give brief presentations of their unique club activities or pretty much what ever they'd like to talk about. Everyone will be able to see and hear about the telescope restoration of Rachel, Leah and the Transit Telescope. There will be plenty of time to check out the new Chabot, of course! Everybody will receive a ticket for the planetarium show, and some of the day's events will take place in the planetarium. There will be workshops for astronomy club newsletters, and much more.

There will be a speaker or two, and more information will be available soon.

One special planned feature will be the first annual? Full Moon Daytime Indoor Messier Marathon, using the Ask Jeeves Planetarium Zeiss Universarium Mark VIII star-ball projector (and binoculars).

Pre-registration by April 1 is \$20 for adults, \$10 for ages 10-18. Registration is available at the door for \$25. More information is available online at <http://www.aanc-astronomy.org>.

For more information about Chabot space and Science Center, including directions, please visit the website <http://www.cosc.org/default.htm>

Stacy's Stargazing Getaways

Bowman Lake – Stacy's secret place

By Stacy Jo McDermott

Well, it's been a while my dear readers. Most of my hiatus has been filled with camping at new places for you to explore...and work. However, I won't dull your senses with my escapades of selling ad space to clients.

Anyway, on with our first installment of my second season of bringing to you some very tasty areas to enjoy the night sky and fun stuff to do

during the day, if you're awake after a great night of viewing the heavens.

So get out your California travel map and move your finger up Interstate 80 towards Lake Tahoe. Just north of the highway 20 off ramp is a little road which leads up to Bowman Lake. Most of the road is bumpy and you might want to consider a high-clearance vehicle, but it is so worth getting there as Bowman Lake is a sapphire jewel set in the mighty Sierra. (However, I have seen on occasion a pre-1980 Cutlass and a very low Honda romping through the roads up there.)

I've been to Bowman Lake three times in the past two years and it's has to be one of my favorite places to go to when I really need to get away from the urban craziness in our beloved Bay Area.

One of the nice things about Bowman Lake is that it's FREE. I like free, free is good, free fits into the budget.

Bowman Lake is tucked up in Tahoe National Forest. You will get good east and south sky depending upon where you set up. Most of the campsites are surrounded by trees, and there is a babbling creek nearby but it's just short walk down to the boat launch from my favorite campsite which makes a nice place to set up the telescope. The times I've been up there, I was blessed with clear skies and comfortable (comparatively speaking) temperatures. Take a look around as there are other areas to set up the tent which have flat, open-to-the-sky sites that are good for your telescope.

During the day, if you are so inclined, there are great hikes, good fishing, good birding (we saw eagles that last time I was up there) and great kayaking/canoeing. Swimming is pretty good if you can get over the first shock of the pristine water. And for the four wheelers in your family or group, the road is pretty fun to drive up to a higher lake.

The Milky Way at night is so bright that at first you may not know what you are looking at. The first night you are up there, cruise around our fair galaxy we call home with a pair of binoculars. (Or if you are only staying one night use the first couple of hours of darkness to get your bearings.) I would estimate, conservatively speaking, that I could see up to magnitude 6 naked eye. The elevation is at about 5,568 feet . So you're about a mile up. If you've not been in a high altitude area, give yourself time to acclimate.

Bowman Lake is a great destination for a few days away from the fray. You should be ready for camping in a primitive environment. There is an outhouse of sorts in the middle of the campground. Fortunately, it is far enough away from most of the campsites that you will not notice it. Bring enough food, water, batteries, etc as the nearest town is a good hour and half away. (It will take you at least 45 minutes to get from the campsites to the smooth part of the access road.) Holiday weekends tend to get the local crowd, so if you can get up a day early, you'll have no problem in finding a good campsite.

Out of a possible 10 stars, I give Bowman Lake six stars for it's all around characteristics.



Directions: I-80 East pass Emigrant Gap to Highway 20. Go west on Highway 20 for about 4 miles. Take a right on County road 18 (Bowman Road). It's about 12 miles up to the first of the campsites, which will be on your right hand side. Please note that this road is ROUGH. I've gone up in 2 wheel drive (in a pick up and a van) and a 4 wheel drive (but stayed in 2HI). What you need to be concerned with is clearance...if you are taking a car, figure on 5 mph max on this road. Also, stop in Auburn for any last minute items, such as ice and top off your gas tank.

Notes: A Tahoe National Forest map is the ideal thing to have.

Dark skies:	7
Ease of access	3
Activities	7
Groovy campsites	8

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New Awards in 2001

The board is planning a new face on SFAA awards this year. The changes will include expanding the Literary Award for larger articles and new categories in the Photography Award. The details will be coming up in the bulletin very soon. Please get out your pens and/or cameras. We had some stellar entries in 2000 and we want to hear and see more from members in 2001!

SFAA
SPRING STAR PARTY

at
HUME OBSERVATORY
Pepperwood Ranch Natural Preserve
California Academy of Sciences
Sonoma County, CA

Friday, March 23, 5:00 p.m.



Enjoy the dark skies at Hume Observatory located at the Academy's Pepperwood Ranch in Sonoma County. Observe all night long. Or fall asleep under the stars or on the porch of their cozy cottage.

Bring along your own telescope or use one of several at the observatory.

Kirsten Vanstone is our host for this special evening arranged exclusively for SFAA members at no charge by our friends at Morrison Planetarium.

Overnight on the Bechtel House porch is limited to 20 people.

Accommodations can also be found in nearby Santa Rosa.

If you plan to attend, please fill out the information below and return no later than February 15th to:

Secretary
San Francisco Amateur Astronomers
1630-34th Avenue
San Francisco, CA 94122-3115



SPRING STAR PARTY
Hume Observatory

Name(s): _____

Number of people: _____
(Members Over 18 Yrs. Only)

Address: _____

Telephone: _____

E-mail: _____

Overnight at Bechtel House is on a first-come-first-served basis.



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

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

- **Speakers**
- **From the President**
- **Event Announcements**
- **Member Articles**
- **and more...**