

The SAN MATEO COUNTY ASTRONOMICAL SOCIETY

February, 2012 594th General Meeting Notice



EVENT HORIZON

Founded in 1960, the San Mateo County Astronomical Society is a non-profit organization for amateur astronomers. Family memberships are open to the public, and visitors are cordially invited to the Society's meetings, which are held on the first Friday of the month, September through June. Detailed information about our events and membership can be found at www.smcas.com

Membership includes a monthly bulletin, discounted subscriptions to calendars and magazines, monthly star parties, use of our loaner telescopes, tours, field trips and guest speakers, plus an invitation to join our online discussion group. To receive additional information, send a note to SMCAS@live.com or call (650) 862-9602.

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SUPER-STAR OF PLANET HUNTERS GEOFF MARCY!!

(Discoverer of Tatoonine and Pandora searches for another Earth before it's too late!)

Leading Astronomer and exoplanet finder Dr. Geoff Marcy, UC Berkeley, will present the latest results from the Kepler Team. Biologists are working with astronomers to assess the conditions necessary for life, especially intelligent life, on planets elsewhere in the universe. This talk will be very popular, so it will be held in the CSM Theater, Building 3, Parking Lot 2. See you there on Friday, February 3 at 8 p.m.



R2D2 and C3PO visit Tatoonine

MONTHLY STAR PARTIES

Crestview Park in San Carlos

Saturday 02/18/2012

Saturday 02/25/2012

(See directions on p. 7)

ANNOUNCEMENTS

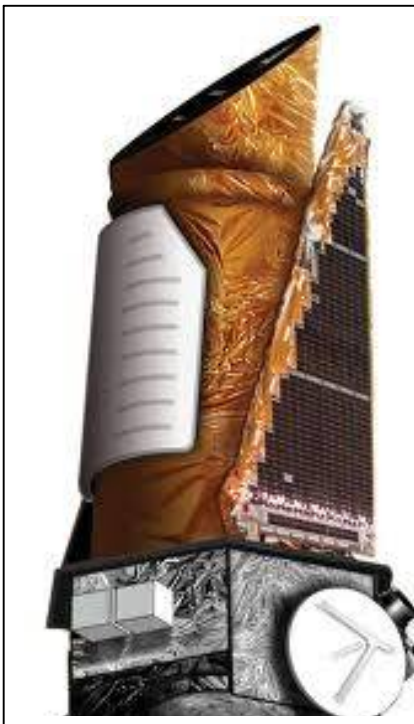
SPEAKER: Dr. Geoff Marcy, Professor of Astronomy, UC Berkeley

TOPIC: The Hunt for Another Earth

TIME: 8:00pm February 3rd, 2012

WHERE: [The CSM Theatre](#), Bldg 3, Parking Lot 2

Free and open to the public, free parking



The new Kepler spaceborn telescope is hunting for Earth-size planets, with hundreds in its sights. Kepler has already found definitively rocky planets, like Earth, and is now hunting for habitable ones. This talk will present up-to-the-minute results from the Kepler Team. Biologists are working with astronomers to assess the environmental conditions necessary for life, especially intelligent life, on planets elsewhere in the universe.



Dr Geoff Marcy is currently Professor of Astronomy at the University of California, Berkeley, famous for discovering more extrasolar planets than anyone else, 70 out of the first 100 to be discovered, along with R. Paul Butler and Debra Fischer.

Marcy has published numerous articles, and has been named one of Newsweek's 100 Americans for the Next Century. His work has been recognized with many distinguished awards, including the UCLA Alumni Professional Achievement Award. He has been covered by the New York Times and has appeared on television, newsmagazines and science shows, from PBS's NOVA and BBC Television to ABC's Nightline, CBS's Nightly News and NBC's Today Show.

From the Prez:

We have an outstanding speaker for February: Dr. Geoff Marcy, a world famous hunter of planets circling other stars. We anticipate a significant interest in his talk, "The Hunt for Another Earth," so we have moved the event to the CSM theatre.

Because we are meeting in the theatre, there will not be a get together for Pizza prior to the meeting. Instead, the talk will start at 8:00PM. See you there.

I would also like to call your attention to resources available to help you explain astronomical concepts to both children and adults. Whether you want to explain these concepts to family, your kid's class, a scout group or any other gathering, there are extensive resources available. Of course, you can always ask for help from the club – many members are experienced discussing astronomy with groups.

If you would like to do it yourself, or see what is available, here are some resources:

Night Sky Network: SMCAS is a member of the Night Sky Network. They have extensive educational material available developed by NASA and ASP designed to help club members present astronomical concepts to the public. Just go to <http://nightsky.jpl.nasa.gov/> and click on the Amateur Resources tab. Although you can get much if the material without logging on, if you do log on there is additional content. If you are a member and would like a logon ID, just send me an email and I'll enroll you. You will you will get an ID and Password by return email.

Astronomical Periodicals: As a member of SMCAS you have the opportunity to order various astronomical periodicals at substantial discounts. An annual subscription to Astronomy costs \$34, Sky and Telescope, \$32.95 and there are additional choices. To get these deals, you need a Night Sky Network ID, but if you send me an email I'll enroll you.

SMCAS Yahoo Group We have a Yahoo group called SMCAS, <http://tech.groups.yahoo.com/group/SMCAS/>, which we use primarily as a mailing list for members. This site is strictly controlled to eliminate spam and only messages approved by a board member gets sent out to the group. By subscribing to this site you will receive email reminders of SMCAS functions, announcements of events and information about upcoming astronomical events in the bay area. You must be an active member to subscribe to this group. You can either request a subscription directly or send me an email and I'll send you an invitation.

Loaner Telescopes We have a number of donated telescopes available to be loaned to members. If you think you would like to try observing, you can borrow one of these. If you bring it to a Crestview Star Party you can get help using it and finding objects in the night sky.

SMCAS Web Site: Our website, <http://www.smcas.com/>, has a wealth of information about our club and its activities. It has details about SMCAS events, astrophotos taken by our members, member profiles, weather condition, the current Event Horizon and an archive of past issues. Although you do not need to be a member to view this site, members will find the information most relevant.

Bayastro Yahoo Group If you do not wish to subscribe to the SMCAS yahoo group, you should subscribe to Bayastro, <http://tech.groups.yahoo.com/group/bayastro/>. This group, moderated by Ken Lum, lists all upcoming public astronomical events for the week, including lectures. You will be amazed at the number of these events each week. If you subscribe to the SMCAS group, you will automatically receive these announcements.

Ed Pieret, President
(650)862-9602

San Mateo County Astronomical Society
SMCAS@live.com



The Nerdiest Video Game Ever

By Dr. Tony Phillips

NASA has a job opening. Wanted: People of all ages to sort, stack, and catalogue terabytes of simulated data from a satellite that launches in 2015. Agile thumbs required.

Sorting terabytes of data? It's more fun than it sounds.

In fact it's a game: Satellite Insight. The Space Place Team at the Jet Propulsion Laboratory created the entertaining app for iPhones to get the word out about GOES-R, an advanced Earth science satellite built by NOAA and NASA.

Described by the *Los Angeles Times* as possibly "the nerdiest game ever," Satellite Insight may be downloaded for free from Apple's app store. Be careful, though, once you start playing it's hard to stop. Some reviewers have likened it to Tetris, one of the most popular video games of all time.

GOES, short for "Geostationary Operational Environmental Satellite," is the workhorse spacecraft for weather forecasters. NOAA operates two (at a time) in geosynchronous orbit, one above the west coast of N. America and one above the east coast. They monitor clouds, wind, rain, hurricanes, tornadoes and even solar flares. The GOES program has been in action since 1975.

GOES-R is the next-generation satellite with advanced technologies far beyond those of the older GOES satellites. It has sensors for lightning detection, wildfire mapping, storm tracking, search and rescue, solar imaging, and more. Many of the sensors are trailblazers. For example, the Advanced Baseline Imager has 60 times the capability of the current imager—16 channels instead of 5. It has twice the spatial resolution and five times the temporal refresh rate, including the 30-second imaging of weather systems over a region of 1000 km x 1000 km. Also, the Geostationary Lightning Mapper can count and pinpoint lightning bolts over the Americas 24/7. It's the first such detector to fly on a geosynchronous satellite, and it could lead to transformative advances in severe storm warning capability.

All in all, GOES-R represents a "huge technological leap from the current GOES." We know this because Satellite Insight tells us so. The app has an informative "Learn More" feature where players can find out about the satellite and the data they have been sorting.

Which brings us back to sorting data. It's a bit like eating Cheerios; just don't tell the kids it's nutritious, and they love it. Helping GOES-R gather and stash data from all those advanced sensors is just as satisfying, too—a dose of Earth science wrapped in thumb-flying fun.

More information about Satellite Insight may be found on the web at <http://itunes.apple.com/us/app/satellite-insight/id463588902?mt=8>. The game is also available in web form (flying thumbs optional) at spaceplace.nasa.gov/satellite-insight.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



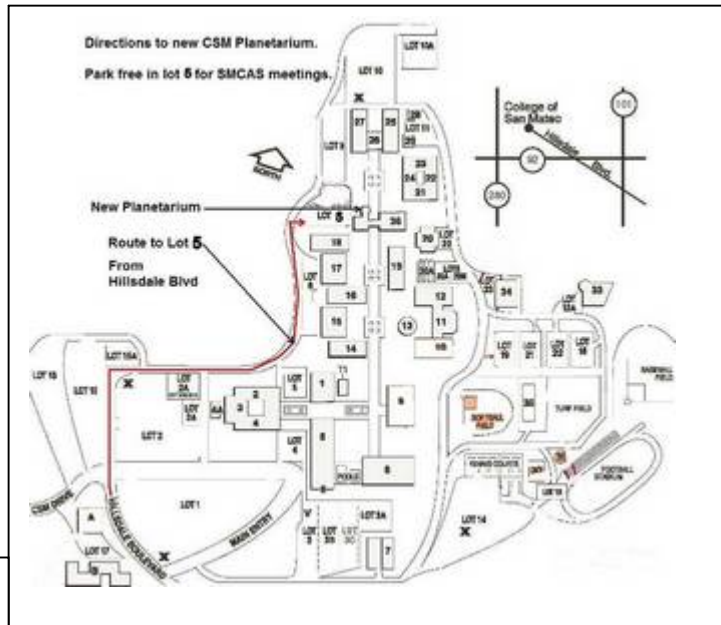
New iPhone game is first NOAA app and only the second NASA game app. Just as with the real GOES-R, the challenge with Satellite Insight is to keep up with the massive influx of weather and other environmental data.

San Mateo County Astronomical Society Event Calendar

| < February 2012 > | | | | | | |
|-----------------------------|--------|---|-----------|----------|------------------------------------|---|
| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| 29 | 30 | 31 | 1 | 2 | 3 8:00 PM SMCAS Meeting | 4 6:00 PM Jazz Under the Stars Sunset: 5:37 PM |
| 5 | 6 | 7  | 8 | 9 | 10 7:30 PM CSM Planetarium Show | 11 Sunset: 5:45 PM |
| 12 | 13 | 14  | 15 | 16 | 17 | 18 5:50 PM Crestview Star Party Sunset: 5:52 PM |
| 19 Washington's Birthday | 20 | 21  | 22 | 23 | 24 | 25 6:00 PM Crestview Star Party Sunset: 6:00 PM |
| 26 | 27 | 28 | 29 | 1 | 2 | 3 |

2012 - PST

| | <u>Feb 18 Rise</u> | <u>Feb 18 Set</u> | <u>Feb 25 Rise</u> | <u>Feb 25 Set</u> |
|--------------------|--------------------|-------------------|--------------------|-------------------|
| Sun | 6:55 AM | 5:51 PM | 6:46 AM | 5:59 PM |
| Moon | 4:36 AM | 2:57 PM | 8:19 AM | 9:59 PM |
| Mercury | 7:26 AM | 6:35 PM | 7:25 AM | 7:10 PM |
| Venus | 8:43 AM | 9:21 PM | 8:33 AM | 9:33 PM |
| Mars | 7:11 PM | 8:11 AM | 6:32 PM | 7:38 AM |
| Jupiter | 9:48 AM | 11:09 PM | 9:23 AM | 10:47 PM |
| 8 PM, East on left | e J i g c | | c e J i g | |
| Red Spot transit | 6:30 PM | | 7:20 PM | |
| Saturn | 10:32 PM | 9:45 AM | 10:03 PM | 9:18 AM |
| Uranus | 8:23 AM | 8:30 PM | 7:57 AM | 8:04 PM |
| Neptune | 7:02 AM | 5:53 PM | 6:35 AM | 5:27 PM |
| Pluto | 3:54 AM | 1:54 PM | 3:27 AM | 1:28 PM |



Directions to Planetarium

After coming off HW92 at Hillsdale Blvd towards CSM, proceed up hill through the second and third sets of traffic lights until you come to the first stop sign, where you enter the campus, and continue straight. After the third stop sign, turn into the first parking lot on the right. This is now called Lot 5. The planetarium is directly ahead of you. Enter the building (36) through the door facing the parking lot.

Directions to Crestview Park

Crestview Park

Come out and bring the kids for a mind-expanding look at the universe!

Bring your binoculars, telescopes, star guides, and lounge chairs for some informal star gazing at Crestview Park. Dress warmly and wear a hat. Visitors should park on the street or arrive before dark so that headlights don't affect the observers' dark adaptation. Bring small flashlights only, with the lens covered with red cellophane or red balloon. Please don't touch a telescope without permission. And parents, please watch your children.

Take Hwy 101 or El Camino to Brittan Avenue in San Carlos, and turn west (right from El Camino). From El Camino, follow Brittan about 2.3 miles to the intersection with Crestview Drive.

From Alameda, go about 1.4 miles to Crestview. Turn right on Crestview. A small sign saying "Crestview Park" is a half-block ahead on the right. Look to the left for the park entry road, a small street between houses #998 and #1000. If after dark, please park on Crestview near the park entrance and walk in the short distance, to avoid safety issues and disturbing the telescope setup and viewing.

From Highway 280 to Edgewood Road. Go east (toward Bay) about 0.8 miles. Left on Crestview Dr. Go 0.5 miles uphill to the intersection with Brittan Avenue. Go one short block to the park entrance on the left.

Note: The park is residential, and adjacent to homes and backyards. Before inviting noisy groups, please call Ed Pieret or Leroy Amen.

For more information, call:
 Leroy Amen: 573-0935
 Leroy's cell: 504-5196
 Ed Pieret: 595-3691

Membership Application

To join the San Mateo County Astronomical Society or to renew your membership please send dues by check payable to "SMCAS" to the address below. Dues are \$35 for a new member, \$30 for Renewing members and \$25 for students and seniors.

SMCAS, at PO Box 974, Station A, San Mateo, CA 94403

Check one: () New member () Membership renewal () Address or info change

NOTE TO EXISTING MEMBERS: do not fill in address etc. unless it's changed!

Name(s) _____

Address/City/Zip: _____

Phone(s) _____ Email _____

Meetings of the San Mateo County Astronomical Society are held the **first Friday of the month (except in July and August)** in the Planetarium at the College of San Mateo, located at 1700 West Hillsdale Blvd. in San Mateo. Exit Hwy. 92 at West Hillsdale Blvd. and, proceed uphill through the second and third sets of traffic lights until you come to the first stop sign, where you enter the campus, and continue straight. After the third stop sign, turn into the first parking lot on the right. This is Lot 7. The planetarium is directly ahead of you. Enter the building (36) through the door facing the parking lot.

Officers: President: Edmund Pieret; **Vice-President:** Chanan Greenberg; **Secretary:** John Fiske; **Treasurer:** Marion Weiler

Board Members-At-Large: Bob Franklin, Ken Lum, Mike Ryan, Murad Hamidouche.

Membership: open position **Newsletter:** Dave Wolf, Ron Cardinale, Darryl Stanford, John Garis, Bob Fies.

Program: Marion Weiler, **Publicity:** open position; **Reporter:** open position

Event Horizon Editor: Dave Wolf **NOTE:** We welcome articles and photos submitted by the 15th of the month prior to publication.

Contacts:

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