

The Refractor

The Bulletin of the Eastbay Astronomical Society
 Founded in 1924 at Chabot Observatory, Oakland, California

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Dr. Gibor Basri

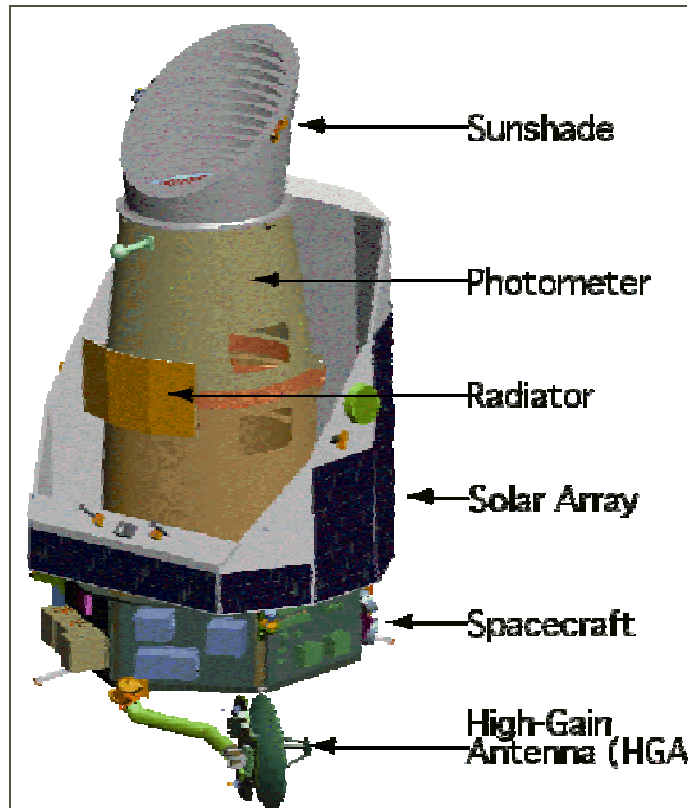
Speaking On:
 The Kepler Extrasolar Planet Search Project

Saturday, November 29, 7:30 pm
 Chabot Space & Science Center
 Physics Lab, 2nd Floor, Spees Building

It wasn't all that long ago that astronomers couldn't say for certain whether any planets existed at all, outside our own solar system. It was ridiculous to think that in all the impossibly vast reaches of the universe, there weren't *any* other planets around any other stars, but there didn't seem to be a way to prove whether there were, or not. Then, in 1991, scientists at the Arecibo Radio Telescope in Puerto Rico, noticed signal anomalies from the pulsar B1257+12 (a rotating neutron star that acts as a sort of space-going flashing beacon) which could only be explained by postulating the nearby existence of a large planet. Over the years, more than 100 more "extrasolar" planets have been discovered by various teams around the world, but they're all of the gas giant variety; those are the only ones we can detect, due to the effect their gravitational pull has on the stars they orbit. Current instrumentation cannot detect Earth-sized planets.

In 2006, NASA plans to send a space telescope into orbit to continuously and simultaneously measure the light output of more than 100,000 stars, in a field of view about the size of your hand held at arms' length. Dr. Basri is the Co-Investigator of this mission, and will tell us how the mission preps are going, and what they hope to discover once their telescope satellite is up and running.

Gibor Basri, born May 3, 1951 in New York City; BSc Physics, Stanford University, 1973; PhD in Astrophysics at University of Colorado, 1979; joined faculty at UC Berkeley's Astronomy Dept in 1982; attained full professorship in 1997; author of more than 100 technical papers, recipient of numerous awards, and CSSC Board Member. ★



The Kepler space-based photometer satellite

Not *too* late to Renew!



Look for the year on your address label. If it's **2004**, you're safe; you've already renewed. If it's **2003**, then you haven't renewed, yet, and this will be your last issue (oh nooooo!)

DINNER WITH THE SPEAKER:

Dr. Gibor Basri

5:00 pm
 Saturday, November 29
HUNAN YUAN
 4100 Redwood Rd., #11
 (next to Safeway)
 Oakland
 (510) 531-1415
 No need to confirm – just show up!

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Visitors to Crater Lake take in the great views of the landscape during the day, and some amazing dark-sky sights at night. Photo by L. Lazzeretti

On the Road Again

by Linda Lazzeretti

While on yet another 'road trip', this time to Crater Lake, I found myself unexpectedly among the stars and their gazers again. This time it was the Crater Lake Institute with its chief amateur astronomer Owen Hoffman. Owen and his fellow institute members decided to lobby the Crater Lake

Lodge owners to promote dark skies gazing being that the lake is one of the darkest sky sights in all the national parks.

He and fellow institute members Ron Cranson (geologist) and Ron Mastrogiuseppe (fire ecology) set up binocular lenses on the famous Crater Lake Lodge veranda above the wonderous caldera. They focused on the 60,000 year old Pumice Castle on the opposite side of the rim highlighting every strata in the rock with their powerful lenses.

Visitors rocking away in their chairs become immediately interested. Once Owen 'had' them, he began the real 'pitch'... Mars viewing at 10:15 down the rim and a night of summer star gazing. Lodge guests were eager to follow him and his numerous astronomical instruments to the soon-to-be 'star party'. Some even had telescopes of their own to add to the festivities.

Owen actually knows one of our own, Jane Houston Jones! While he hasn't met her personally, he has communicated via e-mail with her and the SF Sidewalk Astronomers. Small world! as are the increasingly smaller dark skies these passionate folks are striving to protect by turning on national park visitors to the mysteries of them and their precious darkness. They even gave me one of their "I LOVE DARK SKIES" badges, a nice way to remember them and the brilliant star-studded skies at Crater Lake.

P.S. If you would like to communicate with the institute, you can reach it at: craterinst@moscow.com or Owen Hoffman directly at: pkrngr@aol.com ★

Odds 'n Ends

Email request

Have you changed your email address lately? Were you at @Home.COM, and then @attbi.COM, and now you're at @comcast.net? Maybe you've changed jobs and forgot to tell us. Well, whatever the case, we'd like to hear from you if you have changed your email address. Please send an email from your current preferred email address, include your name, and your old address so that we can update our records. Mail it to EastbayAstro@Yahoo.com – thanks!

Bruce Skelly, EAS Yahoo web administrator

For Sale:

IntesMicroMakNewt56 w/upgrades

I have the top rated Intes Micro MN-56 with JMI -DX-1, 2 speed focuser, installed by Joe Sunseri of Earth&Sky plus Hard Dew Shield and mounted w/ **Parallax Rotating Rings** (the cat's meow) on a Losmandy universal plate ; replaced the orig, finderscope w/ **Lumicon 25x50** right Angle "SuperFinderscope".

Have beautiful wheeled "thermadyne" transport case that

fits assembled scope. Original Owner of all gear. SWEET Rig. SF Bay Area preferred for Inspection and Sale (asking \$1200); do check "new" prices for the package (\$1700 + tx & shipping). Member EastBay Astronomical Society. "Moving on Up" to L A R G E scope. contact: harrysue@jps.net



What's up at Chabot

New Film: *Cosmic Voyage*

A breathtaking journey through time and space! Zoom from the surface of the Earth to the largest observable structures of the Universe, and back down to the sub-nuclear realm—a guided tour across

some 42 orders of magnitude! Explore some of the greatest scientific theories, many of which have never before been visualized on film. *Cosmic Voyage* was nominated for an Academy Award® in the Best Documentary Short Subject Category. First showing on Friday, November 28, at 1:30pm, and then 3:30pm and 8:30pm ★

EASTBAY ASTRONOMICAL SOCIETY MEMBERSHIP APPLICATION FORM

NAME: (please print) _____ Date: _____

ADDRESS: _____

CITY, STATE, ZIP _____

DAY PHONE: _(____)_____ EVE PHONE: _(____)_____

EMAIL ADDRESS: (please print) _____

MEMBERSHIP CATEGORIES:

Important Note: If your address label has 1004 next to your name, you are already renewed for 2004!

- Regular \$24
- Family \$36
- Student (digital newsletter only) \$10
- Contributing \$40
- Sustaining \$60 or more

Optional discounted 12-month magazine subscriptions:

- Sky & Telescope \$32.95
- Astronomy \$29.00

Important Note: All magazine subscriptions must be in to the Treasurer before September 30th for prompt handling!

Optional, tax deductible donation(s) to any of the projects of the Eastbay Astronomical Society:

- Burns Library
- General Project Fund
- Betty Neall Youth Award Fund \$ _____

Other: _____

Total Enclosed: \$ _____

Please mail this form and your check or money order payable to:

Eastbay Astronomical Society
19047 Robinson Road
Sonoma, CA 95476-5517

For further information, please contact Treasurer and Membership Chairman Don Stone at (707) 938-1667, ddcstone@earthlink.net, or write him at the Sonoma address, above.

As a cost savings to us, instead of getting a mailed newsletter, would you prefer to be notified via email that:

The .pdf version of the newsletter is available for download from our website

And,

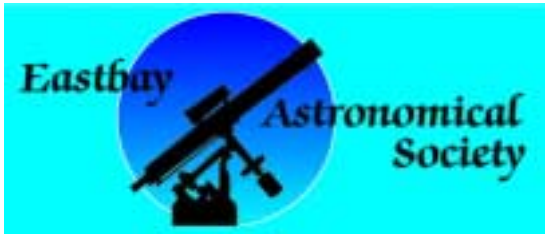
Are you interested in volunteering your time/equipment for public stargazing at Chabot?

Are you interested in doing other volunteer work for Chabot and/or the Eastbay Astronomical Society?

THANK YOU FOR RE-JOINING US!

Join the Eastbay Astronomical Society

www.eastbayastro.org



What you get when you join the Eastbay Astronomical Society:

Monthly newsletter, The Refractor, with interesting articles on currently visible constellations, upcoming lectures, club events, and other local news.

Monthly meetings with featured guest speakers on diverse subjects having to do with astronomy and the space sciences (CCD astro-photography, planetary geology, finding deep-sky objects with telescopes or binoculars, NASA space probes, etc.), and are usually held in the 2nd Floor Astronomy classroom on the first Saturday of the month at 7:30pm. Look for direction signs.



Yearly events, including but not limited to: Meteor shower watches, the annual EAS awards dinner, Bort Meadows star party (local), Barcroft Station high-altitude star party in the White Mountains (several days, about a 6-hour drive from the Bay Area).

Weekend stargazing at Chabot on Friday and Saturday nights (weather permitting). Along with the big 'scopes (Rachel and Leah,

the 20" and 8" antique refractors housed in two separate observatory domes), members are welcome to bring their own equipment to gaze at the current night sky's wonders, receive free volunteer training to help Chabot with public viewing, get advice on how to buy or use equipment, and just have a good time chatting with old and new friends. As a member, you'll also have the satisfaction of contributing to the educational opportunities for children in our community.



Automatic membership in the Astronomical League, with quarterly newsletters.

Opportunity to subscribe to Astronomy or Sky & Telescope at discount prices.

Special discount rates for purchases from various astronomical vendors.



Also, in conjunction with the Chabot Space and Science Center, the Eastbay Astronomical Society also sponsors the Telescope Makers' Workshop at Chabot; you buy the mirror blank and grinding tool; the Workshop provides the instruction, grinding and polishing supplies, and configuration testing free of charge. You can make your own telescope, and with a little luck, it will be optically superior to most anything you could buy for twice the price from the stores or catalogues(!) And you will have a much better idea how telescopes work. Every Friday night in the Physics Lab., 7 - 10 pm.- look for the signs.

Don't delay! Join the Eastbay Astronomical Society, and begin expanding your knowledge of, and appreciation for, the night sky, our world, and the Universe!

In Memorium
Anne Steiner Creese
1923-2003

Anne was born in Salt Lake City Utah on October 16, 1923. After obtaining a Masters Degree in Librarianship at UC Berkeley, she worked as Assistant Librarian at the San Leandro Library (in the old Carnegie library). She married Franklyn Creese 57 years ago and joined the Eastbay Astronomical Society in 1948 where she was Librarian for half a century from the founding of the Burns Memorial Library until her death.



Long interested in music, she joined an opera workshop in Berkeley that Marsden Argal had formed. When that failed after about ten years she formed her own opera workshop in San Leandro the "SLOW" (San Leandro Opera Workshop). They also had their own orchestra, the Victoria Chamber Orchestra. She also sang for more than 20 years with what became the "Lamplighters." Franklyn encouraged her music so she took classes at San Francisco State University and earned another masters degree. Abandoning her library career, except at Chabot Observatory, she devoted most of her time to music. Over the years she taught at all four campuses of the Peralta Community College system, most recently at Laney and Merritt. Her courses included piano, opera history and opera workshop. She conducted church choirs for many years. Her favorite piece was Messiah by Handel which was usually performed with several choirs. In recent years she conducted the "Sing it yourself Messiah."

The EAS presented her with the Helen Pillans Award in 1990 and made her a Life member in 1999.

Her library work culminated with leading the team that merged the Chabot Observatory Library with that of the EAS to prepare the Chabot Space & Science Center Library for public use. This will be a major resource for researchers and visitors.

She died on October 21, 2003 after a short illness.

Chabot Space & Science Center's Executive Director Alexandra Barnett, has decreed

that CSSC will dedicate a seat in the Ask Jeeves Planetarium in her memory.

Carter Roberts,
President, Eastbay Astronomical Society

★

I'm sorry I wasn't able to obtain a more, perhaps, cheerful picture of Anne, but I had this one that I took from several months ago. It was taken during an EAS Board Meeting, in the Soda Board Room of the Ron Dellums Building. I don't know what I was thinking of when I took it, but it occurred to me that this image captured the spirit of Anne's dedication, devotion, and almost fiercely protective nature toward her library, which she and her husband, Frank, have been taking care of for more than a decade.

We, and the books, will miss her. Ed.



Editor's News 'n Views

Howdy Astro Fans! Because our last meeting was near the *beginning* of the month, and this month's meeting is near the *end* of the month, it's been nearly two months since you've seen your last newsletter. It's been a while, and

there's lots to report, so let's get started! On October 5th, the EAS supplied telescopes for public viewing at the annual **Japanese Moon Festival** at the **Lake Merritt Garden Center**. We've been doing this for at least four years, now, and this year we showed the Moon and Mars to the festival attendees. **Paul Hoy, Dan Madsen, Carter**, and myself were there doing the viewing, and, as usual, the free Japanese dinners were yummy! On October 19th, Carter, Dave, Paul, Dan, and myself did some daytime solar observing in Richmond's Miller-Knox Shoreline Park for the **El Sobrante Boy Scouts**.

Then on the 29th, the EAS star partied with **Lake School Elementary in San Pablo**. It was little too windy, but that didn't stop **Astro Wizard Dave Rodrigues, Mark Knowell, George Takahashi**, or myself from viewing the Moon, Mars, Andromeda Galaxy, Pleiades, and other stuff, much to the delight the students, parents, and teachers, there. Then, we were invited by **Seshan Krishna** of the **Lake Merritt Junior Center** for a mini-star party; this time it was just the Astro Wizard and me, and is the second



These young Weebalos checks out sunspots in white light.
Photo by D Saito

time in two years that the EAS has helped out, there. The Junior Center is poised to do some major additions and renovations to the building, and the contractor in charge of the project wants to consult us for what is needed to install a decent, vibration-free "telescope setup pad" out on the rear porch area. Pretty cool, and they could really use one, too; the back porch where we were is shakey (for telescopes). Finally, on Nov 14th, we did a very well attended *Young Astronomers Night* at the **Fruitvale Elementary School**, organized by teacher **Claire Stoermer**, with the usual suspects (Paul, Dan, myself and, well, Dave *would've* been there, but got stuck in SF-to-Oakland commute traffic) (ugh!).

The first three weekends of November, we've been having pretty rotten weather, including the weekend of the lunar

eclipse, so we missed out on that, locally. However, during the nice, clear weekdays, we've been seeing some rather spectacular naked-eye sunspots, solar flares, and even some mid-latitude aurorae happening. Chabot Volunteer Lynn Bechtel, noticed the color of the light in her house after midnight had changed to an unusual shade of red, so she took a peek outside, and saw a large area in the

northeast sky glowing red. Your classic mid-latitude aurora, seen from Hayward, no less! In fact, the strongest solar flare in recorded history (the last 21 years, from 1982), occurred on November 4th - an X-Class 28. The last super-flare that even came close was an X-Class 20, during the last 11-year solar max of 2001. The large sunspots and solar flares continue even now. If you get a chance (and you know EX-ACTLY how to look at the Sun, safely), check it out.

And finally, some important announcements:

- 1) **There is NO EAS meeting for the next month** (December, 2003), BUT, we'll have a kind of Post Holiday Season Party Lite (w/speaker) for our January 3rd meeting.
- 2) Mark your calendars - the **2004 EAS Annual Awards Dinner** will be held on Sunday, March 7, up at the Chabot Space & Science Center, Planetary Landscapes Hall.
- 3) Pretty much ALL of the EAS club meetings in 2004 will be held on the first Saturday of each month.
- 4) **AstroCon 2004** will be hosted by the EAS and AANC (Astronomical Association of Northern California) here in Oakland. There will be lots of famous and vastly interesting speakers and events from July 20 - 24, so again, mark your calendars. <http://www.astrocon2004.org/> for more details.
- 5) Results of the Nominating Committee for club officers and positions for 2004: President- Carter Roberts, Vice-President- Phil Crabbe, Secretary- Linda Lazzarretti, Treasurer- Don Stone, Editor- Don Saito, Meeting Event Coordinator- Dave Rodrigues, Meeting Welcomer- George Roush, Refreshments- Don Saito and Linda Lazzarretti, TMW Director- Paul Zurakowski, Director of Equipment- Ken Swagerty, Librarians- Paul Hoy and Frank Creese (co-directors), Special Groups Coordinator- Terry Galloway (Astrophotography Group I/C Conrad Jung, Occultations Group I/C Mark Gingrich), Telescope Loan Officer- Alan Roche, Events Coordinator- Bruce Skelly, and Club Historian- Alan Fisher. And that's it for now! <whew!> ☆



Dan Madsen shows the kids Mars in a telescope and his self-produced Power Point presentation. Photo by D Saito

Spare Shots

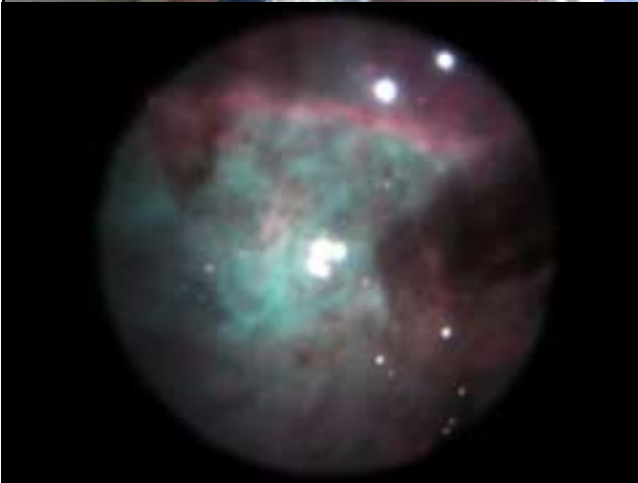
All photos by Don Saito, except one



◀ Paul Hoy does his best to explain solar flares to what must be a 3-year old Scout. (Doing a pretty good job of it, too!)



▲ Conrad Jung took this picture of the Clown Face Nebula using his digital camera through Nellie



◀ Ken Swagerty caught some breathtaking details and colors of the Great Nebula in Orion using his Nikon 5000 digital for a 96 sec, f2.8 exposure through Nellie, Chabot's

new 36" with a 15mm eyepiece. Wow!



▶ The Astro-Wizard at it again! (Imagine what the kid at the eyepiece must be thinking.)

Chuck Smith's very cool homebuilt 6" truss tube telescope

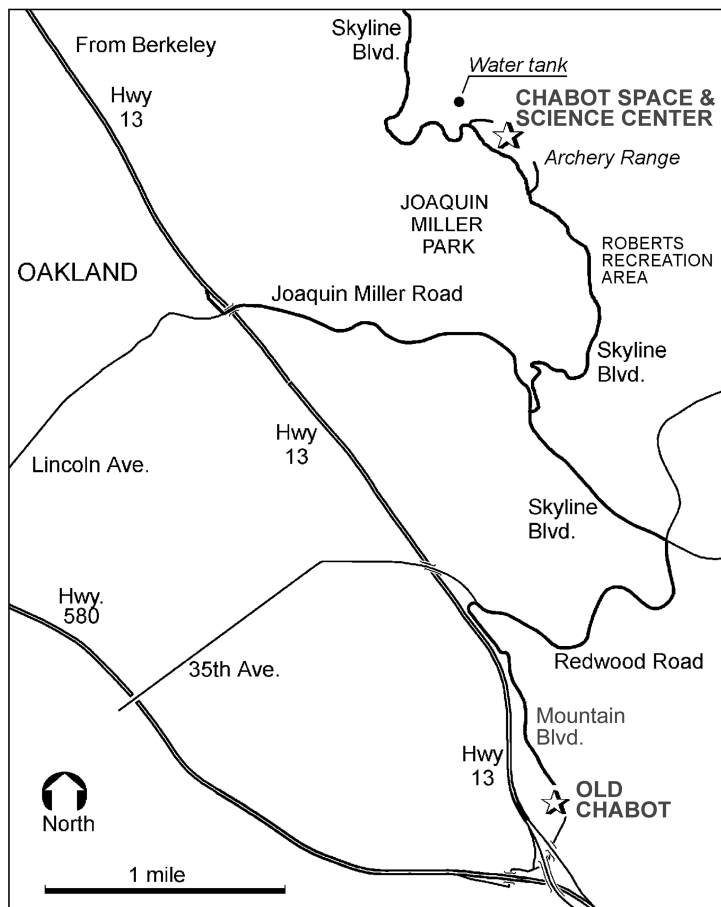
Chabot Volunteer Telescope Operator, Chuck Smith, applied his considerable woodworking and design talents to making this beautiful "suitcase telescope." *I've looked through it, and it works great, too. Prepare to be impressed!*
Ed.





Eastbay Astronomical Society

At Chabot Space & Science Center
 10000 Skyline Boulevard ● Oakland, CA 94619
November 2003
 RETURN SERVICE REQUESTED



FUTURE CONJUNCTIONS

- 2003
 Nov 29 7:30pm EAS General Meeting at Chabot
 Dec 1-31 No EAS General meeting this month!
 11 EAS Board Meeting at Chabot
- 2004
 Jan 3 EAS General Meeting/Holiday Party at Chabot
 8 EAS Board Meeting at Chabot
 18 EAS-Only Star Party w/Rachel and Leah
 Feb 7 EAS General Meeting

Eastbay Astronomical Society

President:	Carter Roberts	(510) 524-2146 cwroberts@earthlink.net
Vice President:	Phil Crabbe II	(510) 655-4772
Treasurer, Membership:	Don Stone	(707) 938-1667 ddcstone@earthlink.net

Articles and photos for *The Refractor* are encouraged. Deadline for the October issue is December 12, 2003. Items may be submitted by mail to the editor, Don Saito, 3514 Randolph Avenue, Oakland, CA 94602-1228. Internet email address: donsaito@pacbell.net Hm: (510) 482-2913.

Join the Eastbay Astronomical Society

- Regular, \$24/year
 - Family, \$36/year
 - Contributing, \$40/year
 - Student, \$15/year (digital)
 - Sustaining, \$60/year or more newsletter, only
- Contact: Don Stone, EAS Membership Registrar
 Telephone: (707) 938-1667 Email: ddcstone@earthlink.net
 Mail: 19047 Robinson Road, Sonoma, CA 95476-5517