

The Refractor

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

Volume 87
 Number 09

July 2011

June Joint CSSC/EAS Lecture

Title: **Searching for Exoplanets**

(by using spectrally dispersed interferometry and high resolution spectroscopy)

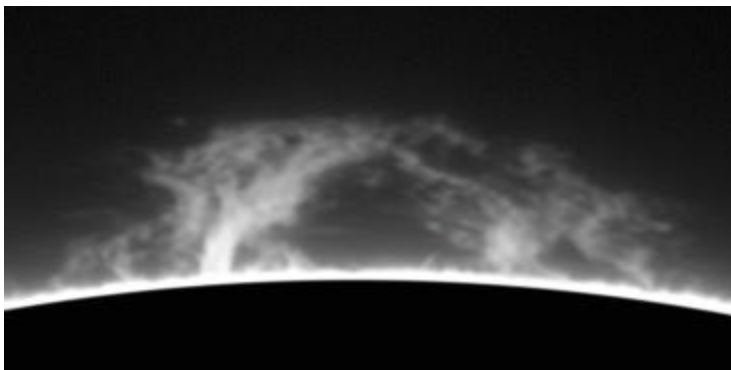
Speaker: **Dave Erskine**

When: Saturday, July 16, 7:30pm

Location: Hauben Resource Center Room
 2nd Floor, Dellums Building
 Chabot Space & Science Center

A small interferometer placed in series with a spectrograph can boost the performance of the spectrograph for Doppler velocimetry (planet search) and high resolution spectroscopy. This can allow small inexpensive lower resolution spectrographs to perform the duties of larger prohibitively expensive spectrographs.

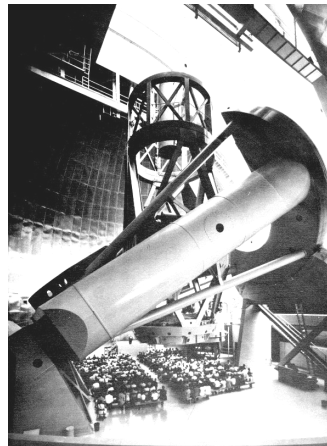
We have been testing the concept at the Mt. Palomar 5-meter telescope. The resolution of an IR spectrograph has been boosted by 10x. Doppler measurements of M stars have been taken with 15 m/s systematic precision. Uncertainty in removing telluric absorption features is currently the important source of systematic error.



See the Solar Prominences at Chabot!

Live video viewing of the sun in H-alpha & CaK light on the observing deck, every sunny Weekend. H-alpha photo by Jim Ferreira

Dave is a physicist at Lawrence Livermore National Lab since 1987, working in the shock physics group, specializing in optical interferometry, especially Doppler interferometry, where they measure the velocity of shock compressed targets. Since 1997 he has been developing novel interferometric methods for spectroscopy and Doppler velocimetry that combine a diffraction grating with an



interferometer, with astronomical applications. He has been testing these ideas in collaboration with UC Berkeley Space Science Laboratory and Cornell University at Lick Observatory and the Mt. Palomar Observatory 200 inch telescope.

**** August Event: EAS Star-B-Q ****

When: **Saturday, Aug. 6, 4pm thru Sunday, Aug. 7, 10am.**

Who: **The Eastbay Astronomical Society members, families and friends.**

Where: **Bort Meadow, Redwood Road**

See map and particulars on page 2

DINNER WITH THE SPEAKER

5:30, Sat, July 16
Hunan Yuan
 4100 Redwood Rd.
 (next to Safeway)
 No need to confirm,
 Just show up!

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EAS Star-B-Q : old fashion barbecue and overnight star party at Bort Meadow, in the Eastbay hills off Redwood Road (4.3 miles from Skyline Blvd.)

August 6th, overnight!

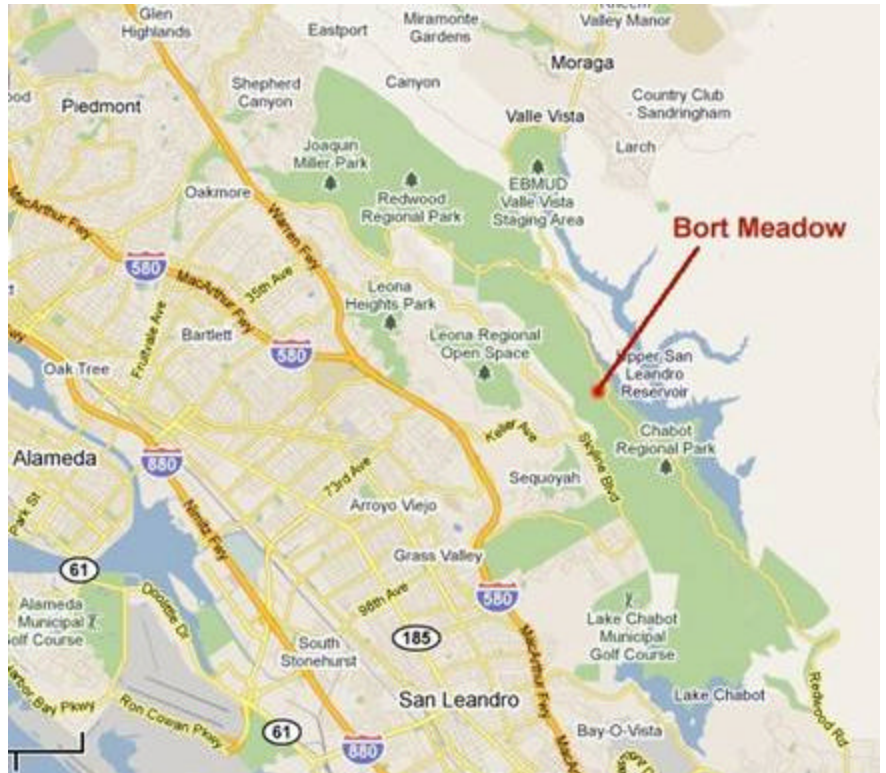
EAS will provide hot dogs, hamburgers, sodas, charcoal, *some* paper plates, napkins and plastic utensils (but BEST if you bring your own). The rest is pot luck! So whip up a salad, bag some chips, bake some cookies, forage the garden for fruit and veggies.

Tent camping overnight, if you wish.

RSVP with number of participants by Friday, July 22nd.

**Don Saito (510) 301-2570
donsaito@comcast.net**

**Richard Ozer (510) 532-5477
rozer@pacbell.net**



WANTED: PHOTOS OF OLD CHABOT

Do you have photographs of the Mountain Boulevard Chabot Observatory? If you do, pick out the best of the best and send a scanned image to the Newsletter editor. A new image will be posted in the newsletter each month.

FUTURE CONJUNCTIONS—2011

Jul 16 General Meeting, Chabot, Physics Lab, 7:30pm
14 Board Meeting, Chabot, Soda Room, 7:30pm
--- EAS MOVN, 7pm-10pm, Wightman Plaza
Aug 20 General Meeting, Chabot, Physics Lab, 7:30pm
12 Board Meeting, Chabot, Soda Room, 7:30pm
7 EAS MOVN, 7pm-10pm, Wightman Plaza

For questions or if you are uncertain about the weather, call (925)926-0853 before 6pm, or check Chabot's weather page at <http://www.chabot.space.org/forms/weather.aspx>

EAS Loaner Scope Program has telescopes available for rental by EAS members. Scopes include 60mm and 80mm refractors, a C-90, two 10 inch Dobsonians, and ; 4 and 8 inch Schmidt-Cassegrains. Scope rental is \$15 a month, with a \$50 deposit. For information, contact Ray Wong by E-mail at qm7@yahoo.com

EAS Library: Hours, 3:00pm - 7:00pm every Friday, and immediately after monthly EAS lecture meetings. The library is located on the second floor of the Dellums Building, down the hall next to the interactive lunar lander exhibit.

Volunteer librarians are needed to expand library hours. **We are particularly interested in any member having experience with book cataloging software.** If you'd like to help contact EAS president Barry Leska at b.leska@comcast.net

Chabot Space & Science Center Invites EAS Members to Volunteer with Us!

- Share your knowledge of and passion for astronomy with thousands of CSSC visitors
- Experience the unique opportunity to operate Chabot's historical telescopes
- Share your own telescope at Chabot*
- Inspire young astronomers and future scientists by assisting students in our astronomy education programs

Explore these opportunities And find out about our next Volunteer Orientation!

<http://www.chabot.space.org/adult-volunteers.htm>

*EAS members who are only interested in sharing their own telescope at Chabot (not a full volunteer commitment) are required to attend a volunteer orientation. After completion, you may join us on deck and share your own telescope any Friday or Saturday night! Chabot Volunteers must make the regular volunteer commitment and pursue official placement through the Volunteer Manager.



Eastbay Astronomical Society

At Chabot Space & Science Center
10000 Skyline Boulevard • Oakland, CA 94619

July 2011

RETURN SERVICE REQUESTED

Eastbay Astronomical Society

President: Barry Leska b.leska@comcast.net

Treas: Richard Ozer (510) 532-5477 rozer@pacbell.net

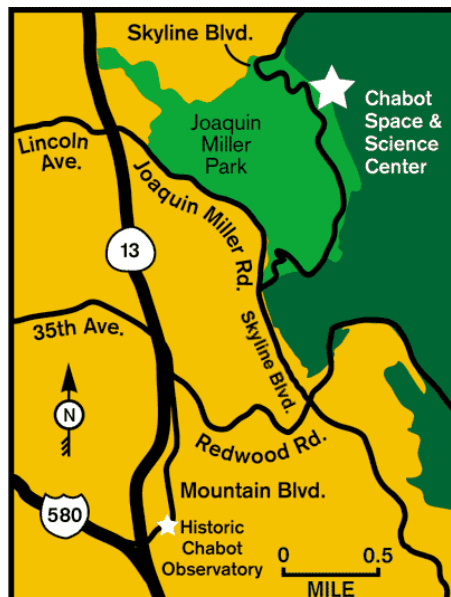
Secretary: Linda Lazzaretti (510) 633-2488

Articles and photos for *The Refractor* are encouraged. Deadline for the July, 2011 issue is July 1, 2011. Items may be submitted by snail-mail or E-mail to: Editor - Jim Ferreira, 753 Oriole Avenue, Livermore CA 94551 bakerst@comcast.net (925) 449-0107

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Join the Eastbay Astronomical Society

- Regular, \$24/year Family, \$36/year
- Contributing, \$40/year Student, \$15/year (digital news-letter, only)
- Sustaining, \$60/year or more

Contact: Richard Ozer, EAS Treasurer
Phone: (510) 532-5477 Email: rozer@pacbell.net

Sign up online at <http://www.eastbayastro.org/>