

The Refractor

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

Volume 81
 Number 11
 September 2005

October 2005 talk:

How to Get Started In Astrophotography

Saturday, October 15, 2005, 7:30 pm

Speakers: Carl Trost, Paul Hoy, Gert Gottschalk,
 and Bill Drelling

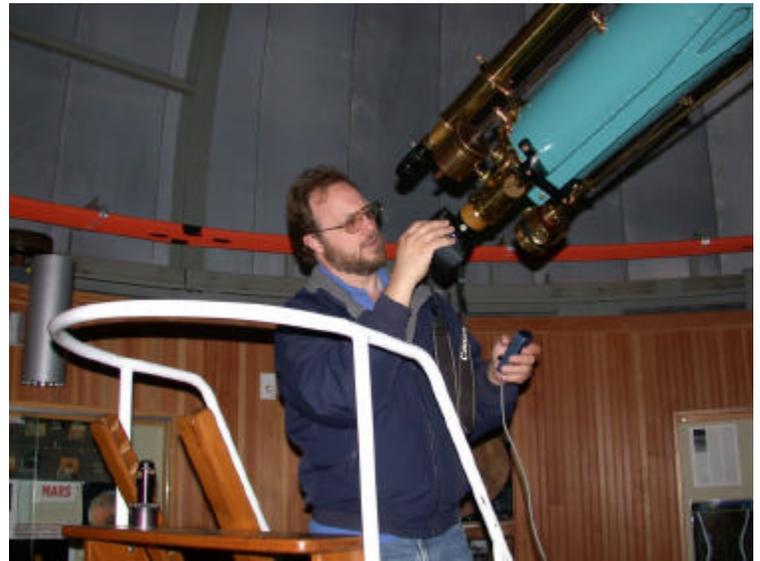
Chabot Space & Science Center
 Physics Lab, 2nd Floor,
 Spees Building

Have you ever wondered about getting started in Astrophotography? Whether you should start with film, a digital camera, or a CCD camera? Does it have to be expensive? What can you do with what you already have?

For answers to these and many more questions, come to what should be a fun and funny EAS meeting. We will have several of our own expert members discuss how they got started, what they would recommend now, given current technology, and especially some of the mistakes (and some were whoppers!) they made and what they learned from them. After their initial presentations, there will be an informal discussion period between the panel and the audience.

Carl Trost (a.k.a. the "smiling astronomer") calls his talk "Astrophotography without a Telescope." He'll talk about how he got started back in ancient times (he claims that he can remember a Kodachrome film speed of 10). Carl has been showing us photos starting with Halley's Comet when he joined the club in 1986, to eclipses, planetary alignments, transits of Mercury and Venus, etc.; all this without a telescope, and claims he has never spent more than \$200 for any one piece of equipment. He will show a 50-year history of archaic cameras (those are all VINTAGE cameras!) and some homemade devices applicable to today's digital cameras.

Bill Drelling, who is new to the club, will show us his set-up, which uses film, and then discuss how he digitizes his images and processes them on his computer. He'll then show us the results, both before and after. He'll also discuss which computer programs he uses for image processing. Bill has recently taken the lead to reestablish the EAS Astrophotography Group.



Every chance he gets, Paul Hoy slaps his digital camera onto one of Chabot's big telescopes in his quest for those long distance photons. Picture by Don Saito

Paul Hoy will show us how he has progressed amazingly in just three short years. He would title his talk "The Mistakes and Pitfalls of a Beginning Astrophotographer." Paul, who uses a digital camera, is going to not only show us his great shots (and they are spectacular!) but show us his bloopers and how he learned from them. He'll also show us his latest digital camera which is currently the best on the market!

Gert Gottschalk will talk about his experience with very expensive commercial CCD cameras, and the remarkable results obtainable from inexpensive webcams.

So if you want to laugh and learn, come to what should be a fun meeting, Saturday, October 15 at 7:30 PM! ★

DINNER WITH THE SPEAKER

5:30 pm
 Saturday, October 15
HUNAN YUAN
 4100 Redwood Rd., #11
 (next to Safeway)
 Oakland
 (510) 531-1415
 No need to confirm—just
 show up!

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Celestial Triple Feature

On Saturday, November 19, 2005, the El Campanil Theatre in Antioch presents a three-part astronomy evening: a film, a personal appearance by John Dobson, and telescopic viewing of the sky itself.

A Sidewalk Astronomer is a documentary film featuring John Dobson, the one-time Vedanta monk who revolutionized amateur astronomy, whose invention, the now ubiquitous "Dobsonian" telescope, brought hands-on telescopic observing to multitudes around the world. Not one to be content with past accomplishments, the 90-year-old Dobson now devotes himself to bringing astronomy to the public by personal appearances and through the organization he founded in 1968, the *San Francisco Sidewalk Astronomers*, a community-service group that has multiplied worldwide and now is simply known as the *Sidewalk Astronomers*. The sidewalk astronomer movement now has brought telescopic vistas to the eyes of millions at locations ranging from light-polluted urban street corners to the dark skies of isolated national parks.

Produced and directed by Jeffrey Fox Jacobs, this 78-minute independent film will have its first Eastbay showing at 7:00 PM on Saturday night, November 19, 2005, at the historic El Campanil theatre in downtown Antioch.

John Dobson In Person

Immediately following the showing of *A Sidewalk Astronomer*, John Dobson will appear personally on the theatre's stage, describing his life and his multifaceted interests and activities, and to answer questions from, and interact with, the audience. You can expect entertainment and enlightenment; the New York Times review of his film described John as "spreading his gospel of curiosity about the stars" and having "a gift for explaining scientific concepts in the form of wry one-liners."

Telescopic Skygazing

Continuing the evening's theme, at about 9:30 PM, just after the film showing and John's appearance, you can move outdoors to a site by the theatre to enjoy telescopic viewing of the heavens yourself. One target will be the planet Mars, now high in our sky and particularly close to the Earth; when viewed with a 100-power telescope it will appear as large as the Full Moon. As a matter of fact, the rugged face of the Moon itself, four days past full, will be rising in the eastern sky. And there will be plenty of farther objects to be viewed: double stars, clusters of stars and even galaxies. (This portion of the evening will of course be dependent on the weather.)

The telescopes you will look through are kindly provided by members of the Mount Diablo Astronomical Society. If you are turned on to astronomy, remember that a similar group of amateur astronomers is likely to be near you.

The El Campanil Theatre

The El Campanil is located in the historic Rivertown Business District of Antioch, at **602 W. Second Street**. To reach the theatre

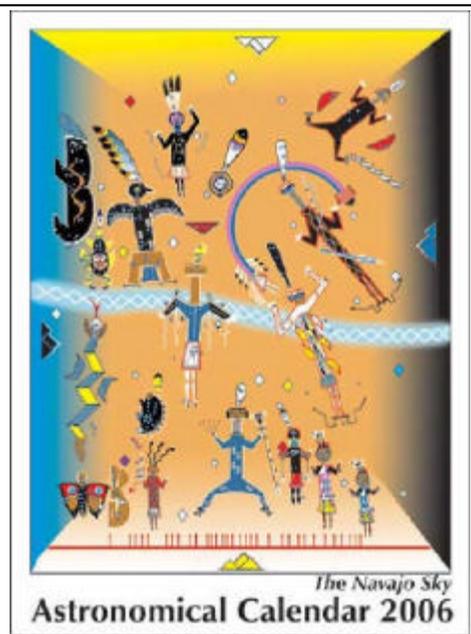


take State Highway 4 to the "A" Street exit in Antioch, then turn off (left if you're going east, right if you are headed west). Follow "A" Street north toward the San Joaquin River. Once you pass Wilbur Avenue "A" Street curves to the left along the waterfront and turns into Second Street, now heading west. The El Campanil is located at the corner of Second and "G" Streets. Public parking is located a few yards past the theatre, with lots on both the right and left sides of Second Street. **Tickets are \$5.00 per person, and \$4.00 for seniors (over 62).** ★

The 2006 Astronomical Calendar

We purchased 25 copies of this year's Astro Calendar by Guy Ottewell, and will sell them to club members for \$25, each. You *can* buy them from Sky and Telescope for \$24.95, but you'll also need to pay an additional \$6.95 for shipping and handling. Buy one from us, and save \$6.90. How nice!

To purchase, contact Don Stone, Treasurer



EASTBAY ASTRONOMICAL SOCIETY MEMBERSHIP APPLICATION FORM

New Membership Renewal of Existing Membership

NAME: _____
(please print)

ADDRESS: _____

CITY, STATE, ZIP _____

DAY PHONE: (____) _____

EVE PHONE: (____) _____

EMAIL ADDRESS: _____
(please print very legibly!)

MEMBERSHIP CATEGORIES:

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

Optional discounted 12-month magazine subscriptions:

- Sky & Telescope \$32.95 Astronomy \$34.00 (both magazines may only be ordered between the months of July and December)

Optional, tax deductible donation(s) to any of the projects of the Eastbay Astronomical Society:
Burns Library \$_____ Betty Neall Youth Award Fund \$_____ General
\$_____ Other: _____

EAS Lapel Pin \$3.00 +\$1.00 per pin for shipping and handling. # of pins _____ Total Amount for # of pins
\$_____

(Tip: If you buy them at a club meeting or event, you can avoid the S&H fee.)

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

By default, (if you have an email address) you will be notified by email that the digital (.pdf) version of the club newsletter is ready to download off the club website. If you prefer to get the B&W hard copy, please check the box below:

I prefer the hard copy mailed to the address entered above.

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 JOINING US!

Membership has its privileges...

- **Monthly newsletter, *The Refractor***, with interesting articles on currently visible constellations, upcoming lectures, club events, stories, equipment reviews, local news, and more.
- **Monthly meetings** with featured guest speakers on all subjects from Astronauts to Zooming telescope eyepieces; from finding deep-sky objects, to planetary geology. Every and any thing having to do with astronomy, telescopes, and the space sciences. All that, and cookies and sodas, too!
- **Help and advice to new telescope owners.** Got a new telescope and don't know what to do with it? Bring it to a meeting; we'll be able to help you figure it out! If you're interested in getting a telescope, we can give you some good advice; be warned: there are a *lot* of bad telescopes out there!
- **Members-Only view nights at Chabot's large telescopes** to avoid the weekend crowds. We view galaxies, nebulae, star clusters, planets, the Moon, comets, double-stars, and whatever else is up!
- **Weekly star parties at Chabot.** Interested EAS members get trained to operate the big 'scopes (Leah, Rachel, and Nellie, the 8", 20", and 36" telescopes housed in three separate observatories) for Friday and Saturday night public viewing.
- **Yearly events:** Annual EAS Awards Dinner, star parties at nearby dark-sky sites, the Barcroft Station high-altitude star party in the White Mtns.
- **Telescope Makers' Workshop.** Friday evenings from 7–10 pm, hosted by Chabot, and operated by the EAS. For a small fee, plus the cost of the mirror and "tool," we will provide instruction and grinding/polishing supplies needed to make your own telescope mirror for less than half the cost of a store-bought one, that will likely be optically superior!
- **Advanced Astro-research Groups** using Chabot's large telescopes. Join a group to fit your particular astro-interest such as CCD or Film Astrophotography, Variable Stars, Solar, Seismological, Extra-Solar Planets, Occultations, Optical SETI, and more.

Access to Chabot's Science Library

Automatic membership in the

Astronomical League (a \$16 value)

***Astronomy and/or Sky & Telescope* subscription discounts (a \$10 value)**

+ Discounts on many items in the Sky and Telescope merchandise catalog



Join the Eastbay Astronomical Society, and begin expanding your knowledge of, and appreciation for, the night sky, our world, and the Universe!



Editor's News 'n Views

Howdy, Astro Fans! It's big, and getting bigger by the day. It's remarkably bright. It's reddish. Give up? It's our favorite *Angry Red Planet*, MARS! But, you already knew that, you canny astro-buff, you. According to my

Starry Night software, Mars and Earth reach opposition the evening of Friday, November 11. You do NOT want to come to up to Chabot to see Mars that night; it's going to be a madhouse up there. If I've said it once, I've said it a million times: Never underestimate the Bay Area. When something as wonderful and unusual as this happens, a fraction of a percentage of the MILLIONS of people here, get it in their heads to try and participate. It could be a pumpkin festival, or it could be fireworks, or even a beached whale; Bay Areans will show up in droves with their kids in tow, to get a piece of the action. I hope Chabot will be "braced for impact," because it's going to be Inundation City up there that weekend, and the public will not take prisoners. *But, wait!* When is a good time for *you* to go see it through Chabot's telescopes? If you're an EAS member, come on up for an easy-going, leisurely **MOVN** (Members Only View Night) on the evening of **Sunday, November 6**, starting right around sunset (weather permitting, of course – be sure to call my home phone after 5pm to verify whether we're on for the evening, or not). Mars won't make a close pass to the Earth again for another 13 years (2018), so do get up there sometime between mid-October to mid-November to try and catch some really great views. We've been looking at it, a little, as it rises above the buildings around 10pm. Despite its still low angle in the sky, we're catching glimpses of very nice details on the surface, which will just get better and better as the month progresses, and Mars rises earlier and earlier in the evening. And speaking of progressing months, here's the next few month's lineup of events:

- **Sun, Oct 16** – Japanese Moon Festival event (4–5 volunteers with telescopes needed), Garden Ctr, Lake Merritt. Contact Carter Roberts at (510) 524-2146 if you can help.
- **Sun Nov 6** – EAS MOVN, Wightman Plaza, Chabot, 7pm – 10pm, call Don after 5pm to verify (510) 482-2913
- **First week of Nov** – two possible school star parties, one in Oakland, the other in Kensington, telescope volunteers needed, contact Carter (510) 524-2146 for details
- **Sun Nov 13** – San Jose Astro Assn annual swap meet
- **Sun Jan 1** - EAS Holiday and Star Party

For 2006: Except for March and December, all EAS General Meetings will be held the 2nd Saturday of each month

And finally: this is your last warning before we start to get *really* strident. Please renew your EAS membership before the end of the month to ensure uninterrupted newsletter service. Thanks!

That's it for now! ★

Spare Shots



◀ A nice shot of Mars by Conrad Jung taken late September 2005

▶ Carter Roberts set up his Coronado MaxScope 40 for Cub Scout Scout-o-Rama in Walnut Creek



◀ A Wolf-grade Cub Scout exposing his mind to the vastness of space through Don Saito's Questar with white light solar filter, trained on sunspots

▶ Gerald McKeegan explains h-alpha views of the sun to a Scoutmaster



◀ Conrad Jung gets his copy of world renowned astro-artist Lynette Cook's new book, *Infinite Worlds*, at the 2005 AANC Astronomy Conference, held at the Randall Museum in San Francisco



That's it for now. Wheee! ★



Eastbay Astronomical Society

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

October 2005
RETURN SERVICE REQUESTED

Last Chance To Renew Your Membership

before the end of October, which is the end of the membership year.

DON'T DELAY (please) (renewal form inside, or, do it online at www.eastbayastro.org)

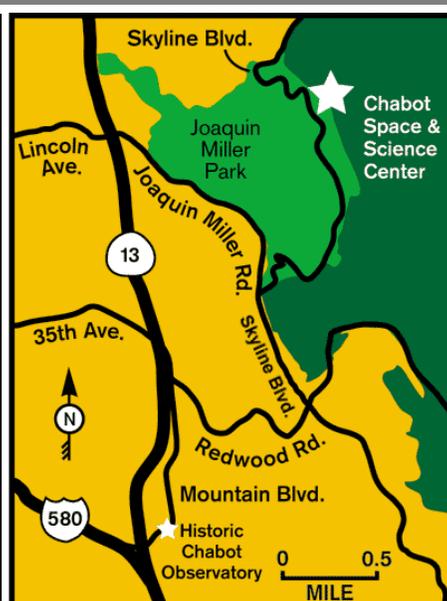
Eastbay Astronomical Society

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cwroberts@earthlink.net
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Vice President: Phil Crabbe II (510) 655-4772
Membership Reg: Bruce Skelly bjskelly@yahoo.com
Events Coord: Dave Rodrigues (510) 483-9191

Articles and photos for *The Refractor* are encouraged. Deadline for the November 2005 issue is October 31, 2005. Items may be submitted by mail to: Editor - 3514 Randolph Avenue, Oakland, CA 94602-1228. Internet email address: donsaito@comcast.net Hm: (510) 482-2913.



FUTURE CONJUNCTIONS

- | | |
|-------|----------------------------------------------------|
| Oct 2 | EAS Members' Only View Night at Chabot |
| 13 | EAS Board Meeting, Chabot, Soda Board Room, 7:30pm |
| 15 | EAS General Meeting, Chabot, Physics Lab, 7:30pm |
| Nov 6 | EAS Members' Only View Night at Chabot |
| 10 | EAS Board Meeting, Chabot, Soda Board Room, 7:30pm |
| 19 | EAS General Meeting, Chabot, Physics Lab, 7:30pm |

Join the Eastbay Astronomical Society

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

Contact: Don Stone, EAS Membership Registrar
Telephone: (707) 938-1667 Email: ddcstone@earthlink.net
Mail: 19047 Robinson Road, Sonoma, CA 95476-5517

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