

# The Refractor

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

Volume 86  
Number 05

Feb. 2010

## FEBRUARY EAS LECTURE MEETING

Lecture Title: **Cycling Around America**

Speaker: **Don Saito**

When: Saturday, February 27th, 7:30pm

Location: Physics Lab, 2nd Floor, Dellums Building, Chabot Space & Science Center

Synopsis: Due to the State of California's economic woes, EAS member Don Saito got laid off from his job as a computer support person with the University of California in early 2009. They gave him a nice termination package, and so Don decided to take this golden opportunity to do something he'd been dreaming of doing for a long time: do a bicycle tour across the United States! After researching the subject, he found that it was quite common for people to do this, so he decided to do something a little more challenging. Instead of merely crossing the country, Don

would go around it, and to make it even more interesting (more??), he set as a goal to visit the four extreme compass points of the contiguous 48 states - north, south, east and west.

This then is his story - how he did it, why he did it, and some of the adventures he had along the way, including: interesting people he met along the way, climbing over mountains, crossing vast deserts, visiting interesting places (Meteor Crater in Arizona, Carlsbad Caverns in New Mexico, a haunted New Orleans in Louisiana, etc.), enduring the physical hardships, and experiencing the great beauty of the country, all in only eight-and-a-half months. As a part of his 'show and tell,' Don will bring the machine he used to pedal over 12,600 miles - a recumbent tricycle made by the British company,



ICE (Inspired Cycle Engineering).

Don Saito was born in Oakland, California in 1956, and before he learned to read or write, became fascinated with space while browsing through an old book that had drawings of the Solar System. Despite the severe disadvantage of owning two "department store telescopes," Don found the (as it was known, then) Chabot Observatory right in his own home town. After a single visit to look through the big scopes, he signed up

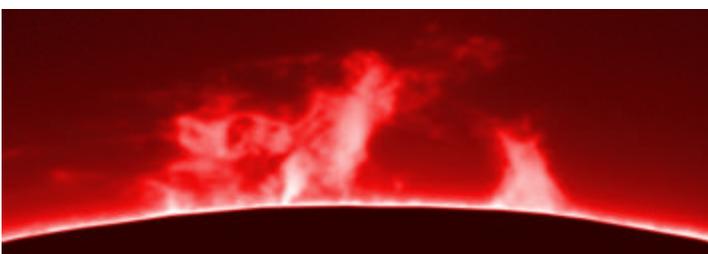
Continue: Page 3, Don Saito

### MARK YOUR CALENDARS!!

**EAS Annual Dinner**

**Sunday Evening, March 28th**

-Announcement flyer in this newsletter-



### FIRE IN THE SKY!

Come out to the CSSC observing deck any sunny Sunday afternoon to enjoy spectacular views of our nearest star.

Hydrogen-alpha photo by Jim Ferreira

**DINNER WITH THE SPEAKER**  
5:30, Sat. Feb.27

Contact  
**Paul Hoy**  
(510) 814-8325  
RSVP by Friday

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## Who's Who: John Westfall; Telescopes Then and Now

John Westfall is a long time EAS member...a very long time member, joining EAS at age 9 in 1947. Then Chabot director, Earl Linsley suggested joining the society after receiving a letter from John expressing a keen interest in astronomy and science. Very early on John had his own telescope, a 3-1/2 inch Skyscope reflector. Further encouraging his interest in astronomy, in 1954 his parents bought him a more substantial telescope, a Tinsley 4 inch f/15 "Saturn" refractor. John regularly used the alt-azimuth mounted 4 inch to observe and draw the Moon and planets. He also used the refractor for short-exposure astrophotography. By 1968 John felt the need for more aperture and acquired a Cave "Astrola" 10 inch f/16.5 Cassegrain reflector. At this point



the Tinsley instrument went into retirement, kept largely for sentimental reasons.

In the late '70s John bought a Celestron C14. It didn't take long to realize the C14 was not particularly portable so it was permanently mounted on a cement column, in a dome enclosure near his cabin in the northern Sierra. When he sold the cabin in 2000, the C14 was

relocated to his new home in Antioch. The telescope is permanently mounted on a substantial Losmandy G11 mount under a Technical Innovations 10 foot dome.

John continues to use the C14 for standardized BV photometry of Uranus and variable stars such as Epsilon Aurigae, a long period eclipsing binary system. He uses an Optec SSP-3 photoelectric photometer with BVRI filter set, taking individual measurements of the target object along with comparison and check stars. John also records and precisely times occultations of stars by asteroids, and Galilean satellite eclipses.

To learn more about John's observatory and his observing projects, contact him by E-mail at [johnwestfall@comcast.net](mailto:johnwestfall@comcast.net)

**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, if you'd like to help contact Paul Hoy at (510) 814-8325 or by E-mail at [ahoy@aol.com](mailto:ahoy@aol.com)

### 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 at our next Volunteer Orientation!**

For upcoming orientation dates, or for more information, please contact us at: [volunteers@chabot.space.org](mailto:volunteers@chabot.space.org) or, call our Volunteer Manager Megan Gray at (510) 336-7414

*\*EAS members who are only interested in sharing their own telescope at Chabot are required to attend a Chabot volunteer orientation and complete a self-guided training worksheet entitled "Getting to know Chabot." After completion, you may join us on deck and share your own telescope any Friday or Saturday night!*

*\*\*Full Chabot Volunteers must make the regular volunteer commitment and pursue official placement through the Volunteer Manager.*

## **FINALLY! PUBLIC TRANSPORTATION TO CHABOT SPACE AND SCIENCE CENTER**

Starting March 31st there will be a regular WEEK-DAY AC transit bus to Chabot leaving from FRUITVALE BART and coming up Fruitvale Avenue to Joaquin Miller.

Buses will be departing BART at 9:30am, 11:35am, 1:55 pm, 2:50pm. Then it will depart Chabot at 9:55am, 11:59 am, 2:20pm, 3:15pm. The hours are unfortunately too short for commuting, but good for visitors and some weekday afternoon volunteers.

A start, but not ideal.... The first and last buses departing Chabot at 9:55am and 3:15pm are too early for visitors to have enough time to enjoy their visits. Chabot closes at 5pm on weekdays except Friday, when it closes at 10pm. Also, weekend days attract more visitors, while there will be no buses serving the center.

**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 at (510) 796-5748 or [qm7@yahoo.com](mailto:qm7@yahoo.com)

Continue: Don Saito

*with the Telescope Makers' Workshop, began to volunteer for projects (clearing brush at CSSC's new/current site, restoring Chabot's telescopes [Rachel, Leah, Transit]), and eventually became a volunteer telescope operator for Chabot, the club newsletter editor from 2001-2008, and an EAS board member for a bit longer.*



## **GOLDEN STATE STAR PARTY 2010**



The GSSP is a 4 night dark sky event held each summer at Frosty Acres Ranch in North-Eastern California, near Mount Lassen, along side rural Adin, California. GSSP has dark skies from horizon to horizon, and room for hundreds of astronomers.

Early registration (through March 30) - \$60, after March 30 - \$70. On site registration - \$75

For more information go to the GSSP web site:

<http://www.goldenstatestarparty.org/>

### **FUTURE CONJUNCTIONS—2010**

- Mar 28 EAS General Meeting, Chabot, Physics Lab, 7:30pm
- 11 Board Meeting, Chabot, Soda Board Rm, 7:30pm
- 21 EAS MOVN
- Apr 24 EAS General Meeting, Chabot, Physics Lab, 7:30pm
- 8 Board Meeting, Chabot, Soda Board Rm, 7:30pm
- 18 EAS MOVN
- May 22 EAS General Meeting, Chabot, Physics Lab, 7:30pm
- 13 Board Meeting, Chabot, Soda Board Rm, 7:30pm
- 16 EAS MOVN
- Jun 26 EAS General Meeting, Chabot, Physics Lab, 7:30pm
- 10 Board Meeting, Chabot, Soda Board Rm, 7:30pm
- 13 EAS MOVN
- Jul 24 EAS General Meeting, Chabot, Physics Lab, 7:30pm
- 8 Board Meeting, Chabot, Soda Board Rm, 7:30pm
- 18 EAS MOVN

\*Please call Gerald McKeegan at (925) 926-0853 after 5pm on the date of the MOVN to verify that it has not been cancelled due to weather or other considerations.

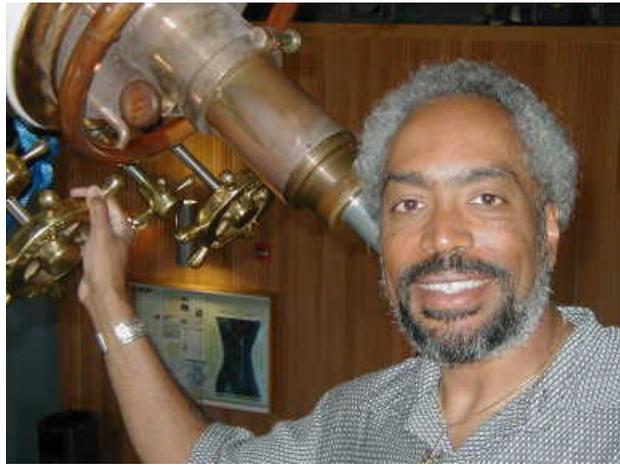
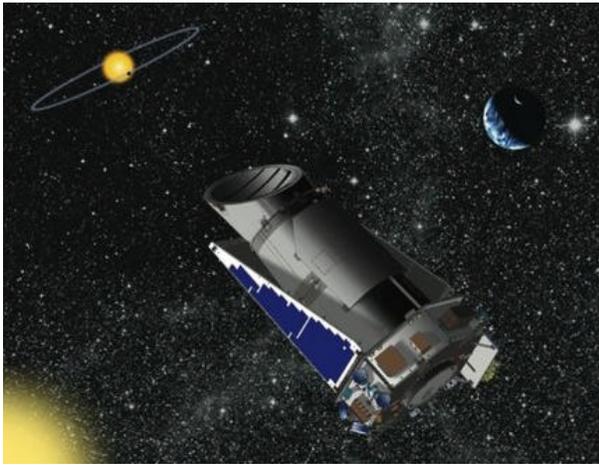
Eastbay Astronomical Society  
Eighty-sixth Annual Awards Dinner  
Sunday, March 28, 2010

Kepler and Copernicus Rooms, Chabot Space & Science Center  
10000 Skyline Boulevard, Oakland, California

Doors open at 5:45pm, with Dinner at 6:30pm  
Awards Presentation, door prizes and lecture at 8:00pm

Kepler: The Search for Earth-sized Planets Around Other Stars

**Presented by Prof. Gibor Basri, PhD**



During the last decade, astronomers have finally begun finding planets around other stars. We still don't know anything about the number of planets like the Earth (almost none of the known planets has a solid surface). A NASA mission ("Kepler") should directly answer the question by finding many such planets. This dedicated space telescope will monitor more than 100,000 stars in its wide field-of-view for several years, looking for the telltale dip in their light caused when a planet crosses in front of them. It relies on the strict periodicity of planetary orbits to eliminate noise from stellar variability. Given our current understanding of planet formation, it should find at least several hundred terrestrial planets, some of which will be in the "habitable zone" of their stars (meaning liquid water could survive on the surface given a reasonable atmosphere). Kepler should provide estimates for the total number, orbital and size distributions, and correlations of these with stellar properties for inner planetary systems. This will be very helpful in assessing the likelihood of Earth-sized (or larger) planets in our Galaxy.

**2010 Helen Pillans Award Recipient**  
To Be Announced

The dinner will be catered by Harry's Hofbrau featuring Roast Beef, Turkey, Ham and Spinach Lasagna. This dinner always receives rave reviews every year we have it.

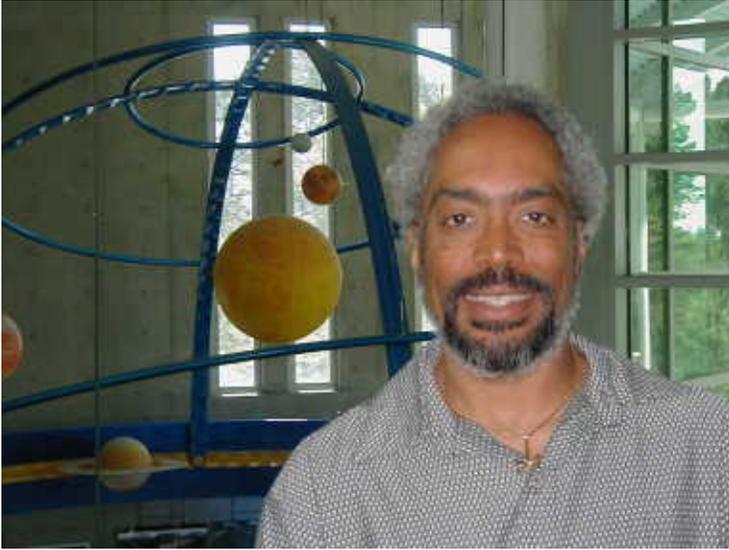
Cost per person will be **\$35.00**. Purchase your attendance online using your PayPal account or credit card by going to the EAS web site: <http://www.eastbayastro.org> ...or, mail your check, payable to the EAS, as soon as possible to: EAS Treasurer, 2539 Cordova St., Oakland, CA 94602.

**Please RSVP before March 7th.**

[Kepler probe photo courtesy NASA]

## Speaker Bio:

Gibor Basri was born May 3, 1951 in New York City to Saul and Phyllis Basri. He grew up in Fort Collins, Colorado, with younger brother David. Saul was a Physics professor at Colorado State University; Phyllis taught ballet and other dance. The family lived in Burma in 1957 and in Sri Lanka in 1965, both under Fullbright Lectureship appointments. GB attended Ft. Collins High School. He got a BSc in Physics from



Stanford University in 1973, and a PhD in Astrophysics from the University of Colorado, Boulder in 1979. GB is married to Jessica Broitman, and has 1 son.

GB joined the faculty of the Berkeley Astronomy Dept. in 1982, and became a full professor in 1994. His work in the 1980s concentrated on star formation and the study of T Tauri stars, as well as continuing studies of stellar activity. He was also lead author on an Annual Reviews of Earth and Planetary Science article entitled “What is a Planet?”

GB has written nearly 200 technical publications, including numerous review articles. There are more than 7000 citations of his works. GB was awarded a Miller Research Professorship in 1997, and became a Sigma Xi Distinguished Lecturer in 2000. He has served on committees helping to award major NASA and NSF grants and projects, and awarding time on the (world’s largest) Keck telescopes. In December 2001, NASA selected the Kepler mission as one of its next Discovery missions. GB is a Co-investigator on this mission, which has as its goal the discovery of extrasolar terrestrial planets, and the characterization of all planets in the inner solar systems.

GB became increasingly involved in science education, and encouraging the participation of minorities in science. His efforts in this, and on behalf of increasing diversity at the University, were recognized by the Chancellor’s Award for advancing Institutional Excellence in 2006. He has served since 1998 on the Board of the Chabot Space and Science Center, and as a Board Member for the “I Have a Dream, Oakland” Foundation for a decade. GB served as Acting Chair for the Astronomy Department in 2006-07. In 2007 he was selected by Chancellor Birgeneau after a national search as the founding Vice Chancellor for Equity and Inclusion at Berkeley.



# Eastbay Astronomical Society

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

**February 2010**  
*RETURN SERVICE REQUESTED*

## Eastbay Astronomical Society

President: Paul Hoy (510) 814-8325 ahoy@aol.com

Treas: Gerald McKeegan (925) 926-0853 geraldspace@earthlink.net

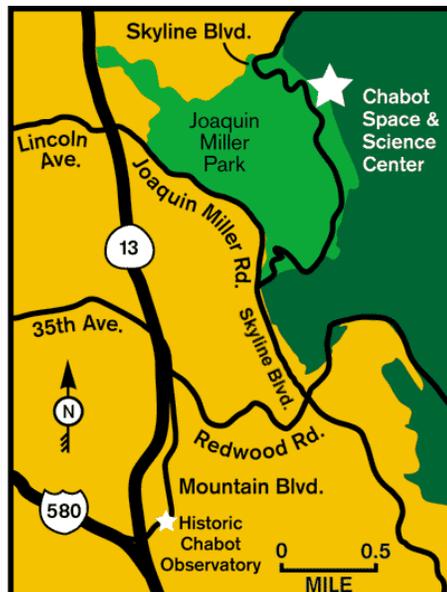
Secretary: Linda Lazzaretti (510) 633-2488

Articles and photos for *The Refractor* are encouraged. Deadline for the Feb. 2010 issue is Feb. 10, 2009. Items may be submitted by mail or E-mail to: Editor - Jim Ferreira, 753 Oriole Avenue, Livermore CA 94551 bakerst@comcast.net (925) 449-0107

Vice President: Alan Fisher

Membership Reg: Bruce Skelly EastbayAstro@gmail.com

Events Coord: Dave Rodrigues (510) 483-9191



### FUTURE CONJUNCTIONS

- Mar 28** General Meeting, Chabot, Physics Lab, 7:30pm  
**11** Board Meeting, Chabot, Soda Room, 7:30pm  
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\*Always call to confirm

### 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: Gerald McKeegan, EAS Treasurer  
 Tele: (925) 926-0853 Email: geraldspace@earthlink.net  
 Mail: 1760 1st Ave, Walnut Creek, CA 94597-2561

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