



The Refractor

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

Volume 87
 Number 12

Oct. 2011

October EAS Lecture

Title: "What Do Black Holes Look Like?"

Speakers: Jason Dexter, postdoctoral researcher at U.C. Berkeley

When: Saturday, October 15th, 7:30pm

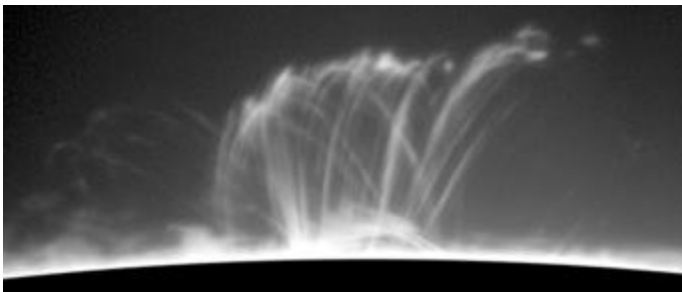
Location: Hauben Resource Center Room
 2nd Floor, Dellums Building
 Chabot Space & Science Center

Despite their name, black holes power the brightest objects in the Universe. I will describe the observational evidence for the existence of black holes, the types of black holes that we see, and the reason that we can see them. Then I will attempt to answer the question of what the supermassive black hole at the center of the Milky Way will look like when Astronomers manage to image it in the near future.



Artist's conception of a black hole -- NASA

Jason Dexter received his B.A. in Physics from Occidental College, Los Angeles. He received his Ph.D. in Physics in 2011 at the University of Washington, Seattle. His Thesis was titled "Radiative Models of Sgr A and M87 from Relativistic MHD Simulations." He has been awarded the Kavli Institute for Theoretical Physics Graduate Fellowship, UCSB; four consecutive years, the NASA Earth & Space Science Fellowship; and, the Theoretical Astrophysics Center Fellowship, UC Berkeley. His major fields of interest are theoretical astrophysics, accretion disks, radiative transfer, black holes, compact objects, active galactic nuclei and relativity.



See Solar Prominences at Chabot!

Live video viewing of the sun every Saturday and Sunday Afternoon

DINNER WITH THE SPEAKER

5:30, Sat, Oct 15

Hunan Yuan

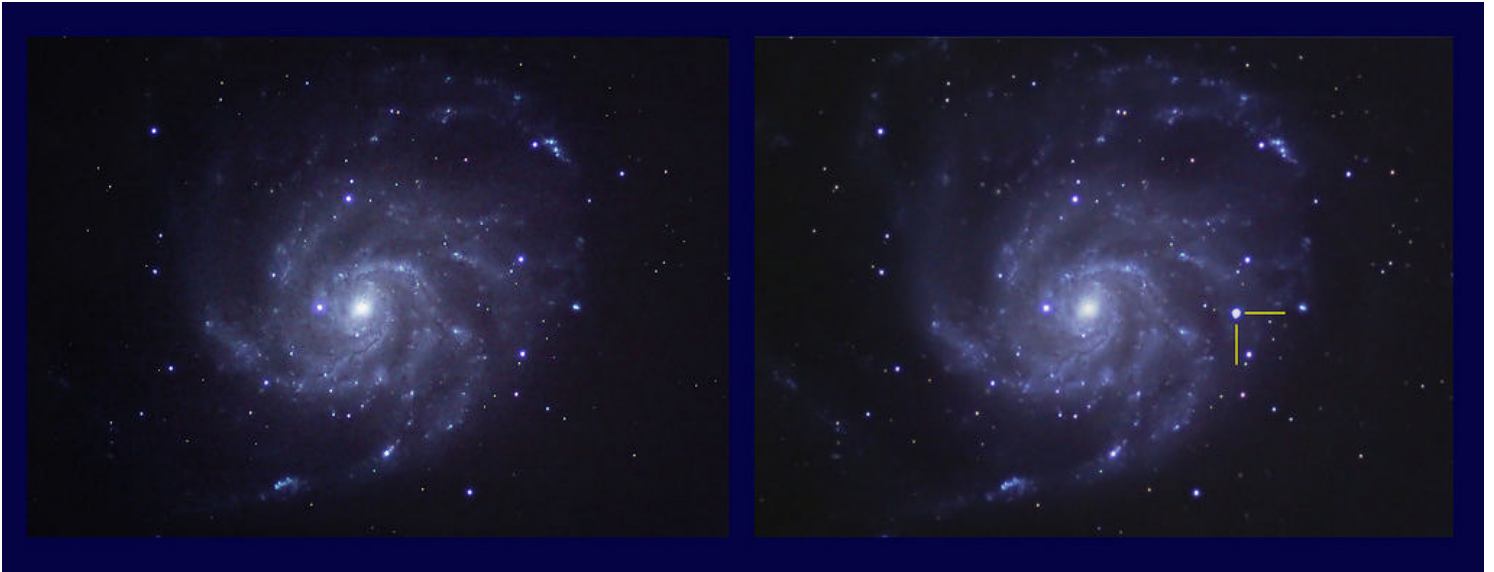
4100 Redwood Rd.
 (next to Safeway)

No need to confirm,
 Just show up!

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- EAS Loaner Scopes page 2
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Supernova SN2011fe in the Pinwheel Galaxy, M101



When discovered on 24 August 2011, SN2011fe was 17th magnitude, by September 1st, when the right hand image was made, it had brightened to almost 11th magnitude. These splendid images of M101 were shot by CSSC's Conrad Jung. He explains how the supernova photo was acquired:

“The main image of M101 was taken with the 8-inch refractor [Leah] and the exposure sequence was relatively long, 2+ hours. The image of M101 with the supernova is a composite made up with an image of M 101 and supernova taken with the 5-inch finder/guide scope combined with the image from the 8-inch telescope to fill out the galaxy image.”

Conrad's supernova photo will be featured in the next issue of Sky and Telescope. Congratulations, Conrad!

FUTURE CONJUNCTIONS—2011

Oct 15 General Meeting, Chabot, Physics Lab, 7:30pm
13 Board Meeting, Chabot, Soda Room, 7:30pm
2 EAS MOVN, 7pm-10pm, Wightman Plaza
Nov 19 General Meeting, Chabot, Physics Lab, 7:30pm
10 Board Meeting, Chabot, Soda Room, 7:30pm
13 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.chabotspace.org/forms/weather.aspx>

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.

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

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.chabotspace.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

October 2011

RETURN SERVICE REQUESTED

Eastbay Astronomical Society

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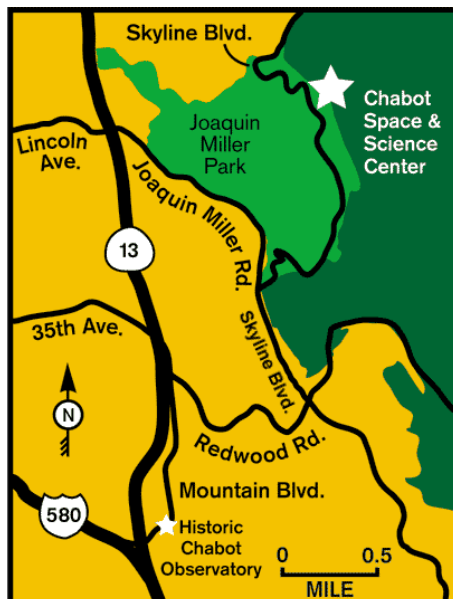
Secretary: Linda Lazzaretti (510) 633-2488

Articles and photos for *The Refractor* are encouraged. Deadline for the Nov. 2011 issue is Nov. 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/>