

February 2015

Sponsored by the Santa Barbara Museum of Natural History



Chuck McPartlin points to his live image of comet Lovejoy at the January Westmont outreach. Photo credit: Tom Totton.

#### **2014 OUTREACH SUMMARY AND NEWS**

Starting in 2015, the club has decided that we will not allow the use of green laser pointers at outreaches that are above the legal limit of 5 milliwatts. If you see someone operating a laser which is brighter than this level, please ask that person to stop using it.

We had another good year for outreach in 2014, with 227 events, and 22 cloud-outs. We had 16,829 guests.

Volunteers with 6 or more events who get their membership extended for a year are Angela Bates, Bill Clausen, Adrian Conrad, Tim Crawford, Joe Doyle, Mike Farris, Ruben Gutierrez, Art Harris, Jürgen Hilmer, Chris Larson, Adrian Lopez, Zanna Lucy, Pat & Chuck McPartlin, Janet & Martin Meza, Bonnie & Bruce Murdock, Max Neufeldt, Edgar Ocampo, Javier Rivera, David Salvia, Colin Taylor, Cez & Tom Totton, Chris Ulivo, Tom Whittemore, Patricia & Jerry Wilson, Paul Winn, and Linda & Harold Yarbrough. I hope to have the Night Sky Network recognition certificates and pins for awards at the February meeting.

## **OUR FEBRUARY SPEAKER**

Our speaker for the February 6<sup>th</sup> meeting will be Professor Harry Nelson from UCSB. His topic will be "Touch the Dark Matter." A synopsis of his talk follows: "We know from astrophysical evidence that the vast majority of matter in our Universe neither absorbs nor emits light. Does this `Dark Matter' have any relation to the strong, electromagnetic, or weak interactions that comprise our `Standard Model' of particle physics? I'll discuss the research program that seeks an answer to that question, by seeking direct interactions of the dark matter in laboratory experiments, and focus on the recent results obtained by the LUX experiment that operates a mile underground in an old gold mine in South Dakota."

# **OUTREACH REPORT**

Some rain and cloudouts since the last newsletter, but AU volunteers Chatt Aiton, Angela Bates, Tim Crawford, Joe Doyle, Art Harris, Ken Kihlstrom, Pat & Chuck McPartlin, Janet & Martin Meza, Bruce Murdock, Max & Max Neufeldt, Tom Totton, Tom Whittemore, Jerry Wilson, and Paul Winn still managed to show cool things in the sky to <u>718</u> happy viewers.

#### FEBRUARY EVENTS

Here's the schedule so far for February. Remember, the events are subject to change and cancellation, so for the latest updates, contact Chuck at 964-8201 or macpuzl@west.net.

#### WEDNESDAY, FEBRUARY 4, SETUP 5:30 PM

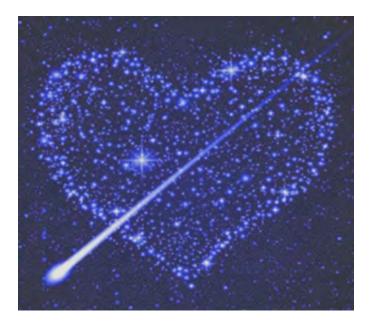
Telescopes for kids and parents at St. Andrews preschool, on Arroyo Road near Auhay Drive in Goleta. The official address is 4575 Auhay Drive, but the entrance is off Arroyo.

## THURSDAY, FEBRUARY 5, SETUP 5:30 PM

Telescopes for a Science Night at Goleta Valley Junior High, 6100 Stow Canyon Road in Goleta. We'll set up on the blacktop playground area on the west of the campus.

#### FRIDAY, FEBRUARY 6, 7 PM

Catch a quick planetarium show, followed by our monthly meeting at 7:30 in Farrand Hall at SBMNH.



# SATURDAY, FEBRUARY 14, 6:45 PM

Monthly Public Star Party at SBMNH, outside of Palmer Observatory. Happy Valentines Day!

#### WEDNESDAY, FEBRUARY 18, 8 PM

KITP Public Lecture, *Starquakes and Exoplanets in the Milky Way*, at Kohn Hall, the home of the Kavli Institute for Theoretical Physics, at UCSB. Doors open at 7:15PM. An RSVP is required, as seating is limited. http://www.kitp.ucsb.edu/public-lecture-rsvp or call (805) 893-6363

#### THURSDAY, FEBRUARY 19, SETUP 4:30 PM

Telescopes for Ellwood Elementary School's Science Night. They're at 7686 Hollister Avenue in Goleta. We set up on the blacktop out back.

# FRIDAY, FEBRUARY 20, 7 PM

Monthly Westmont Public Telescope Night at their observatory by the baseball field. The big 24-inch scope should be open for viewing.

# TUESDAY, FEBRUARY 24, 7 PM

Telescope Tuesday at the Camino Real Marketplace

in Goleta. We set up in the plaza by the theater.

# THURSDAY, FEBRUARY 26, SETUP 5 PM

Telescopes for Santa Barbara Community Academy, at 850 Portesuello Avenue in Santa Barbara.

# "Time Travel"

Tom Totton, SBAU 2015 President To review again, we had great events in December. At our 1st Friday Meeting, December 5. Professor Phil Lubin described how we could defend the earth from asteroids and propel spacecraft using powerful lasers. Our December 11 Holiday Party took place at the Santa Barbara golf course restaurant, Mulligan's, and we had a great meal followed by a silly exchange of gifts. Mike Farris gave up the presidency after two years, and after four years of being the vice president, so that is a lot of perseverance for our club and he was rewarded by the secret awards group with a small trophy. Then, just at the end of the party, the power failed due to the wind storms and our late party conversations were cut short.

So far in January 2015, we had a great 1st Friday Meeting reviewing the Juno mission to Jupiter by Professor Theo Clark of JPL/NASA. Our 2<sup>nd</sup> Saturday Planning Meeting covered a number of ideas, but the Star Party at the SBMNH was clouded out. Javier told us that the Palmer Observatory is really ready for construction and that he has picked out a solar telescope and camera to buy out of the \$3K budget the SBAU allowed him. It should be in operation by the end of March with a celebration on April 24 for a special star party.(Breaking news – Permit denied, no construction.) It is so nice to be associated with the Santa Barbara Museum of Natural History and their science and astronomy section.

Chuck McPartlin led a Thursday school outreach, which was followed by a large Friday evening crowd at Westmont College Observatory, with Tom Whittemore and others showing that beautiful green comet called C/2014 Q2 Lovejoy. Please dress warmly and come out to help Chuck with the outreaches, even without a telescope, passing out some literature and/or passing on your enthusiasm for astronomy. I like telling folks how big a light year is to the size of our solar system and the distance Voyager 1 has traveled. Getting a chance to ask questions of "Astropedia Chuck" is perhaps the best benefit. View and join the SBAU club events at the Night Sky Network that Chuck also coordinates:

http://nightsky.jpl.nasa.gov/clubview.cfm?Club\_ID=278

The Telescope Workshops are back in swing almost every Tuesday evening at 7:30PM at the Broder Building across the creek at the SB Museum of Natural History, with a bit of polishing, lots of testing, and a mix of astrophotography hints and explanations from our club geniuses, which seems to be everyone but me. Lots of show and tell on making telescopes and using them, but I just go to let it all sink in like a show on the cosmos. Maybe someday I will put all the teaching going on there to good use.

I have setup a new Flickr photo website for the SBAU for 2015 at

https://www.flickr.com/photos/sbaushots/sets/ where you can review the latest images involving club activities, including some shots from the general meeting, telescope workshops, and outreaches. If you have some club or astronomy related images you would like to post, please email me to discuss access. [Please feel free to contact me about any club concern.] Previous images of club activities from 2010-2014 I have taken are posted here:

https://www.flickr.com/photos/27241501@N03/ collections/72157623730631261/.

Finally, do not forget to keep an eye on the SBAU Forum (add that into your daily automatic home tabs on your browser, see Options). There is room for all sorts of conversations, photos, questions, classified telescope equipment ads, and general information. Just click on "register" to get a password from our great webmaster, Paul Winn, who has set that up for us. I will see about posting club planning meeting note files there as well. It is a nice place for members to exchange information without dealing with comments from around the world. When you log in, you can click on "Show unread posts since last visit" which makes it easy to see what is new.

Take care and Thank You for supporting astronomy activities in the Santa Barbara area.

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AU AstroNews, the monthly publication of the Astronomical Unit (AU), is mailed to the AU membership. For publishing consideration for the next month, submit astronomical items by the 20th of the current month!

#### AU annual membership rates: Single = \$15 Family = \$25

AU mailing address: Astronomical Unit c/o Santa Barbara Museum of Natural History 2559 Puesta Del Sol Road Santa Barbara, CA 93105-2998 On the Web: http://www.sbau.org

February 2015								
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
1	2	3	4 St. Andrews Preschool 5:30PM	5 Goleta Valley Junior High 5:30PM	6 SBAU MEETING 7PM	7		
8	9	10	11	12	13	14 SBMNH Star Party 6:45 PM		
15	16	17	18 KITP TALK 8PM	19 Ellwood Elementary 4:30PM	20 Westmont College 7PM	21		
22	23	24 Camino Real Marketplace 7PM	25	26 SB Community Academy 5PM	27	28		

# The Astronomical Unit

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