

The Observer

SAN BERNARDINO VALLEY AMATEUR ASTRONOMERS

Member of The Astronomical League

<http://sbvaa.org/>



Volume #57, Issue 1

Since 1958

January, 2015

Meeting:

January 24, 2015

Location: **NEW!**



First Christian Church
2102 E. Foothill Dr.
San Bernardino, CA

7:00 p.m.

Pre-meeting Dinner,
5:00 to 6:30 p.m.,

NEW!



Coco's
2442 Highland Ave,
Highland

After the meeting telescopes will be set up for viewing and members will be available to answer questions. Bring your telescope to observe with us.

***No telescope is too humble,
and beginners are always
made welcome!***

Program

Understanding the Greatest Images of the Universe

The Sagittarius Star Cloud

January's Program will be the third of twelve lectures that revolve around some of Hubble's greatest images. (Some of you may remember lectures one and two (The Rationale for a Space Telescope, and, Comet Shoemaker-Levy 9 and Jupiter, respectively) and the magnificent images that were shown last year when we could still get into Grove School.



The Sagittarius Star Cloud is one of the richest star fields in the night sky and is located near the center, or "bulge," of our galaxy. In this field there are stars of varying brightness and colors. We will learn how Hubble images help astronomers estimate a star's intrinsic luminosity, distance and age by applying the Hertzsprung-Russell diagram. Then we will move on to studies of globular clusters. (There are about 150 globulars scattered throughout our galactic halo.)

SBVAA Officers

President:

Vice President:

Treasurer: Fidel Hernandez 909-864-0615

Secretary - Educational Outreach: Chris Clarke
909-384-8539 Work
909-875-6694 Home

Star Party Coordinator: Tom Lawson
909-8828198

SBVAA Webmaster: Gerald Rezes 909-810-7217

Newsletter Editor: Jim Sommer 909-792-3587

Calendar of Upcoming Events

January 17, Star Party, Johnson Valley

February 21, Star Party, Johnson Valley

February 28, Club Meeting

March 21, Messie Marathon @ RAS's
GMARS site in Landers, CA

March 28, Club Meeting

April 18, Star Party, Johnson Valley

April 25, Club Meeting

Club Meeting Dates for 2015

Mark your calendars:

February 28

March 28

April 25

May 30

June 27

July 25, (dinner only, no regular meeting)

August 22, outdoor BBQ

September 19

October 24

November 21

December 5, (To be confirmed later)

JANUARY IS MEMBERSHIP RENEWAL TIME



Attention all club members. Please send in your 2015 renewal membership dues of \$30. Make check payable to SBVAA. Send check to our club treasurer:

Fidel Hernandez
27799 21st Street
Highland, CA 92346

or bring it to the next club meeting on January 24.

Club Star Party Dates



February 21, Johnson Valley

March 21, Messier Marathon, GMARS

April 18, Johnson Valley

May 16, Johnson Valley

June 11 - 14, Grandview

July 18, Johnson Valley

August 15, Johnson Valley

September 11 - 13, Grandview

October 10, Johnson Valley

November 14, Johnson Valley

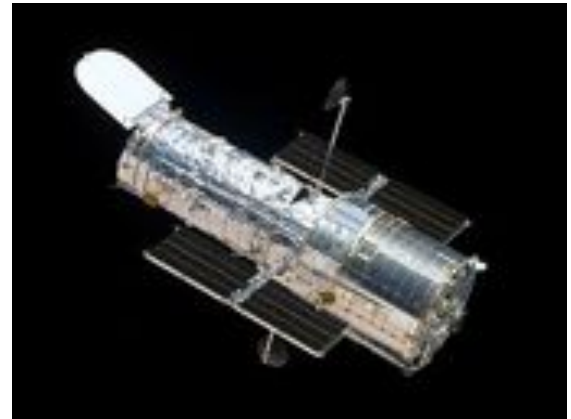
December 12, Johnson Valley

Wildlands Conservancy and outreach parties to be announced as they become known.

HST Takes Most Detailed Photos of M31

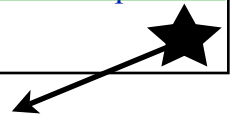
NASA/ESA Hubble Space Telescope has produced the largest and sharpest image ever taken of the Andromeda galaxy (M31). Image released Jan. 5, 2015.

(Credit: NASA, ESA, J. Dalcanton (University of Washington, USA), B. F. Williams (University of Washington, USA), L. C. Johnson (University of Washington, USA), the PHAT team, and R. Gendler.)



The newly-released image stretches across about 48,000 light-years of the galaxy's disk, according to Hubble officials. In total, the image shows more than 100 million stars in the galaxy. Hubble officials revealed the new photo during a [news](#) conference here at the 225th meeting of the American Astronomical Society.

www.space.com/28195-best-andromeda-photos-hubble-telescope.html



High-Tech Airships Next on NASA's Plate?



One of NASA's new citizen science endeavors could involve high-tech, record-breaking airships designed to aid scientific research projects.

NASA has proposed a challenge that calls for airship designs that can fly higher and longer than existing airships. At the moment, no airship — blimp-like devices — can maintain an altitude of 65,000 feet (20 kilometers) for more than 8 hours. Weather balloons can soar to that height, but the balloons are difficult to control and vulnerable to winds.

Scientists at NASA's Jet Propulsion Lab in California think airships could aid them in research on astronomy and climate change and even be more capable than weather balloons. An airship could carry telescopes into the stratosphere to observe stars and other celestial bodies. Right now for example scientists are working on an airship that could survey the skies of Venus. Airships could also provide valuable insight into weather patterns.

The proposed 20-20-20 Airship Challenge would become part of NASA's Centennial Challenges program that offers prizes to citizen-designed tech that solves research problems that are of interest to NASA. NASA will first gauge public interest in the airship competition before officially launching it. NASA officials say there could be between \$2 million and \$3 million in prize money available for the competition.

(For complete story, go to: www.space.com/28132-nasa-airship-challenge.html)