It's Cluster Time! M3 and M13 by LAS member Gary Garzone

Longmont Astronomy Society Newsletter
April 2012
From the President:

LAS Meeting – Thursday April 19th

The March meeting of the Longmont Astronomical Society is this Thursday, April 19th, at Dickens Tavern, 300 Main Street, Longmont, CO. Please join us for dinner around 6 pm. The general meeting will begin at 7 pm.

Open forum this month. If you would like to discuss some astronomy related topic you are invited to present it to the group. I’m planning on doing a couple short presentations on the LAS “All Sky Camera” and a update on our Sunset Observatory proposal to the city.

Editor’s Note:  The pub shrimp are tasty, if you like a little heat in your food. And they leave their pot roast cooking all day, like you should. And the coldest Guinness around! A couple months of this and we'll need wider doors on the observatory.....

In the sky this month:

Meteor Showers
Lyrids   April 22  with an estimate of 10-20 per hour
Eta Aquarid*   May 5, with an estimate of 20-40 per hour

Planets
Mercury: lousy in the morning, maybe binoculars could help
Venus: High in the west at sunset with a magnitude of -4.7 the beginning of May, it was mistaken for an approaching plane by a tired pilot over the Atlantic, who dived to avoid it and injured a half dozen passengers.
Mars: high in the south at sunset and fading in size
Jupiter: you missed your chance on this one for awhile
Saturn: opposition on April 15, so if you hurry, you can still get a good view

Interesting Stars/Galaxies
Cluster month

Club Calendar:
Next meeting: Thursday, May 17
Sunday, May 20  annular solar eclipse – make your plans to watch or wait until 2017. Centered on Albuquerque, if you want to travel a bit.

Upcoming Star Parties and Events
• Star party for Legacy Elementary, 7701 Eagle Blvd in Fredrick on Thursday, April 26, 2012 - 8:30pm. Scopes and volunteers are needed!
• National Astronomy Day is on Saturday April 28th and we celebrating with a public star party at the Sunset Golf Course. DFM Engineering is setting up one of their 16 scopes. Star party will begin around 9 pm and end around 11 pm. Club house will be open so food and bathrooms will be available. Gary has put in
switch to shut off a couple of the lights. Scopes and volunteers needed – maybe a good turnout so please come whether or not you have a scope!

**Fiske Planetarium:** Admission costs $3.50 for kids and seniors and $6 for adults

**Friday, April 20**
7:30 pm Many Faces of Hubble

**Thursday, April 26**
7:30 pm Live Faculty Talk: Secrets of Andean Skies*

**Friday, April 27**
7:30 pm Live Faculty Talk: Secrets of Andean Skies*

**Thursday, May 3**
7:30 pm CO Skies: Summer Skies

**Friday, May 4**
7:30 pm The Crowded Sky

**Sunday, May 20**
All Day Solar Eclipse
Astronomy Day*

**Internet Resources:**


**Supernova in M95**

Late last week several professional and amateur astronomers reported a possible 13th-magnitude supernova within the outer arm of the barred spiral galaxy M95 in Leo. Italian observer Paolo Fagotti was the first to call attention to the outburst on March 16.86 Universal Time. Although early reports quickly established that the star had brightened as much as six magnitudes in the previous three days, it was unclear if the star was a supernova or a cataclysmic variable star. If it had been the latter, the star could possibly have been in our own Milky Way galaxy.

Supernova SN 2012aw (pointed at by arrow) is located in the outer arm of the barred spiral galaxy M95 in Leo. Greek amateur Anthony Ayiomamitis obtained this view on March 20th from his home outside of Athens.

*Anthony Ayiomamitis*

Spectral analysis soon revealed that the outburst was indeed a type-IIP supernova in M95. (The “P” means that the explosion’s brightness hits a “plateau” for several days before fading away.) It was assigned the designation SN 2012aw on March 20th, and appears about 2 arcminutes southwest of M95’s nucleus.
Alex Cherney spent 18 months photographing the night sky from a dark site in Australia, and here are some results! A more complete set of his photos are at [http://www.terrastro.com/](http://www.terrastro.com/)

**Upcoming Space Missions:**

**Current Space Missions:**

**NASA extends Kepler, Spitzer, Planck missions**

Scientists can continue using the three spacecraft to study everything from the birth of the universe with Planck to galaxies, stars, planets, comets, and asteroids with Spitzer to determining what percentage of Sun-like stars host potentially habitable Earth-like planets with Kepler.

By Jet Propulsion Laboratory, Pasadena, California — Published: April 6, 2012

Planck:  http://www.esa.int/SPECIALS/Planck/SEMQ05XX3RF_0.html

Spitzer:  http://www.spitzer.caltech.edu/  and a new view of the Tarantula nebula in IR

This month’s Wacky Idea:

Help Find Hubble's Hidden Treasures

NASA’s Hubble Space Telescope has made over one million observations during its more than two decades in orbit. New images are published nearly every week, but hidden in Hubble's huge data archives are some truly breathtaking images that have never been seen. They're called Hubble's Hidden Treasures, and between now and May 31, 2012, the European Space Agency (ESA), NASA's partner in the Hubble mission, invites you to help bring them to light. Just explore the Hubble Legacy Archive (HLA) at http://hla.stsci.edu/, dig out a great dataset, adjust the contrast and colors using the simple online tools, and submit to the Hubble's Hidden Treasures Contest Flickr group. For more information about the competition, visit the Hubble's Hidden Treasures webpage at http://www.spacetelescope.org/hiddentreasures

TV Tips:

Secrets of the Sun

With new tools, scientists are striving to better grasp our star and its potentially widely destructive solar storms. Airs April 25, 2012 on PBS Nova (Channel 6)
Current Events:

International Dark Sky Week

The International Dark Sky association is bringing attention to this growing problem — and its surprisingly simple solution — on the week of April 14–20, 2012. This celebration of the night sky started in 2003 with the efforts of a high school student, Jennifer Barlow, and has continued every year since then.

http://www.youtube.com/watch?v=uJNUaGUPnPM  Watch the video for the Lyrid meteor shower on April 21.  Good viewing with the new moon.

One heck of a blast on the Sun Mon 4/16.  Video at http://spaceweather.com  and so good it made it on the national news (NBC, anyway)