

Messier 8 by LAS member Gary Garzone

**Longmont Astronomy Society Newsletter
June 2010**

From the President:

Our monthly meeting is this Thursday, June 17th, at the IHop Resturaunt, 2040 Ken Pratt Blvd., Longmont, CO. Please join us for dinner about 6 pm at the resturaunt. The general meeting will begin at 7 pm. The speaker is Dr. Suzanne Metlay who will give a presentation about the Solar Dynamics Observatory (SDO) mission.

Following Suzanne's presentation there will be the business meeting. The proposed changes to the LAS by-laws will be discussed and there will be vote to accept or reject them. There will also be a treasurer report and status reports from the "all sky camera" and observatory projects.

Next month, July 15th, the speaker will be Chris Peterson who will discuss all sky cameras and his meteor research. At the August 19th meeting, Dr. Allen Kiplinger will make a presentation about his recent visit to the Dutch solar telescope on La Palma in the Canary Islands.

In the sky this month:

Meteor Showers mid summer lull....

Planets

Mercury:lost in the mountains at sunset, switching to morning visibility and best in mid-July

Venus: in the west at sunset

Mars: in the west at sunset

Jupiter: improving, about 30 degrees in the east at sunrise

Saturn: starting to fade, west at sunset

Interesting Stars/Galaxies

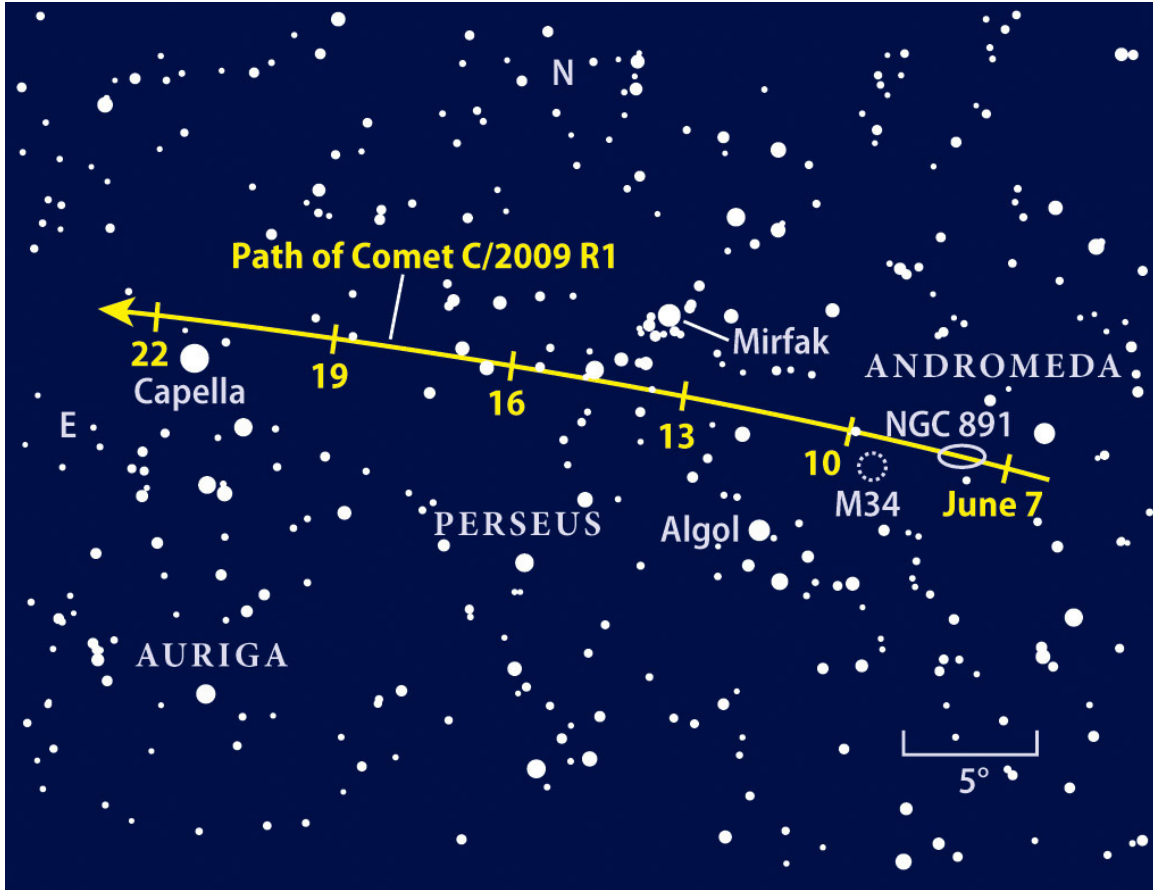
NEW COMET McNAUGHT: A fresh comet is swinging through the inner solar system, and it is brightening rapidly as it approaches Earth for a 100 million mile close encounter in mid-June. Comet McNaught (C/2009 R1) has a vivid green head and a long wispy tail that look great through small telescopes. By the end of the month it could be visible to the naked eye perhaps as bright as the stars of the Big Dipper. Because this is the comet's first visit to the inner solar system, predictions of future brightness are necessarily uncertain; amateur astronomers should be alert for the unexpected. Visit <http://spaceweather.com> for sky maps, photos and more information.

Northern Hemisphere observers have waited a long time to see a naked-eye comet with a distinct tail. With any luck, the wait will end this month. For Comet C/2009 R1 (McNaught), observers can look for it with unaided eyes, follow up with a view through binoculars, and finish with a close-up observation through a telescope. Through even a medium-sized scope, the comet's tail should look like a celestial sword angling upward into the northern sky.

Comet McNaught will move northward during June. On the 21st, it passes less than 2° above the star Capella in the constellation Auriga the Charioteer. Capella is a yellow star that ranks as the night sky's sixth-brightest luminary.

The 21st also marks the morning of the June solstice, the start of summer north of the equator. Unfortunately, observers living far north can't benefit from McNaught's higher

position because of twilight that lasts all night and because of potential interference from noctilucent clouds, which glow high in our atmosphere long after the Sun has set.



X-37B SIGHTINGS: Amateur satellite watchers have spotted a US Air Force space plane similar in appearance to NASA's space shuttle circling Earth in a heretofore secret orbit. Known as the "X-37B," it can be seen in the night sky shining about as brightly as the stars of the Big Dipper. Flyby predictions and more information may be found at <http://spaceweather.com>.

Club Calendar:

Next meeting: IHOP July 15 7:00 PM

Fiske Planetarium:

Internet Resources:

http://svs.gsfc.nasa.gov/vis/a010000/a010500/a010584/g2010_026_helio_overview_port_al.wmv will get you to a NASA movie that runs through the batch of sun observing

satellites currently in orbit. Not bad images and animation. Right click on the movie when it plays and go full screen for best viewing.

Wandering Black Hole:

A team of astronomy researchers at Florida Institute of Technology and Rochester Institute of Technology in the United States and University of Sussex in the United Kingdom, find that the supermassive black hole (SMBH) at the center of the most massive local galaxy (M87) is not where it was expected. Their research, conducted using the Hubble Space Telescope (HST), concludes that the SMBH in M87 is displaced from the galaxy center. The most likely cause for this SMBH to be off center is a previous merger between two older, less massive, SMBHs. The iconic M87 jet may have pushed the SMBH away from the galaxy center, say researchers. The research is being presented today at the 216th meeting of the American Astronomical Society in Miami. It will also be published in The Astrophysical Journal Letters. For more information about this research, visit: www.fit.edu/newsroom .

It's been nearly 40 years since Apollo astronaut Eugene Cernan became the last man to walk on the lunar surface, but at <http://www.moonzoo.org/live> you can take your own journey over the lunar surface.

The site is powered by the efforts of visitors to Moon Zoo – the latest project from the team that brought you Galaxy Zoo and Solar Stormwatch. Using the site, you'll see images from NASA's Lunar Reconnaissance Orbiter which show the lunar surface in unprecedented detail, and with a few clicks you can record what you find while exploring.

The Moon Zoo team.

Space Missions:

June 16, 2010: Almost 40 years ago, NASA's Mariner 9 spacecraft relayed to Earth the first video images of Mars' northern polar ice cap, revealing a strange pattern of spiral swirls that has puzzled scientists ever since. Using new data from the Mars Reconnaissance Orbiter (MRO), researchers have finally uncovered the secrets of the troughs that snake through the ice cap like a spiraled maze. For the details, check http://science.nasa.gov/science-news/science-at-nasa/2010/16jun_martianspirals/

This month's Wacky Idea:

NASA wants to put a picture of you on one of the two remaining space shuttle missions and launch it into orbit.

After registering at the Face in Space Web site, you'll be able to upload an image that will be put on a disc and flown aboard a shuttle on a future mission. You'll receive a confirmation number and information about which flight your "face" will be on.

Then, after the launch, participants will be able to print a commemorative certificate signed by the mission commander. You can also check on mission status, view mission photographs, link to various NASA educational resources, and follow the commander and crew on Twitter or Facebook.

To learn more and upload your image for flight, visit <http://faceinspace.nasa.gov>.

Humor Dept:

This is an artist's illustration of the Upsilon Andromedae A planetary system, where three Jupiter-type planets orbit the yellow-white star Upsilon Andromedae A. Astronomers have recently discovered that not all planets orbit this star in the same plane, as the major planets in our solar system orbit the Sun. The orbits of two of the planets are inclined by 30 degrees with respect to each other. Such a strange orientation has never before been seen in any other planetary system. This surprising finding will impact theories of how planetary systems form and evolve, say researchers. It suggests that some violent events can happen to disrupt planets' orbits after a planetary system forms. The discovery was made by joint observations with the Hubble Space Telescope, the Hobby-Eberly Telescope, and other ground-based telescopes.

