



M51 by Gary Garzone

Longmont Astronomy Society Newsletter
May 2009

From the President:

The next meeting is this Thursday at the David Skaggs building at 325 Broadway in Boulder, CO. Dr. Biesecker will give a presentation about the STEREO satellites. He'll talk about some of the non-solar discoveries such as comets and the current solar cycle. Then we'll go down the hall and Steve Albers will give us a 'Science on a Sphere' showing some new STEREO and SOHO projections and high resolution projections of planets and moons.

Next month we meet back at the Front Range Community College on June 18th. Dr. Suzanne Metlay's presentation will be ""Your Eyes on the Sky – NEOs, Satellites & More" – How amateur astronomers aid discovery and do much of the detailed work to confirm orbits. Dr. Suzanne Metlay is operations director of Secure World Foundation, a private non-profit organization dedicated to improving space governance.

The nights are more pleasant now and we've gotten a clear night or two lately. Late spring skies offer many fascinations, Messier 13 and the Ring are beaconing shortly after darkness. Virgo is straight south and there are many, many galaxies to explore. Now if the mosquitoes would just stay away...

In the sky this month:

Meteor Showers

June Lyrids Occurs: June 10-21 Peak: Jun. 15/16

With the Full Moon on June 18, going to be difficult.

Half a dozen minor showers - http://www.meteorshowersonline.com/june_radiants.html

Planets

Mercury rising at 5:20 right now, it's not a good time to observe

Venus: what's that very bright object in the East at sunrise? Why, it's Venus!

Challenge: try to locate Venus in the daytime... it's surprisingly easy.

Mars rising around 4 in the morning, it's improving as we approach

Jupiter straight south at dawn, very brilliant

Saturn sets after midnight, and is fading.

Interesting Stars/Galaxies: Summer is almost here – look for the bright stars of summer (Vega and Arcturus) as dusk falls.

Club Calendar:

June 18th at FRCC Community Room. Monthly talk at 7:00 PM by Suzanne Metlay – NEOs and More. I think she's going to try to talk us into confirming orbits....

- **May 29th:** 35th Anniversary (1974) Luna 22 to orbit the Moon.
- **May 29th:** 90th Anniversary (1919) Solar Eclipse confirmed Einstein's General Theory of Relativity.

Fiske Planetarium:

Symphony of the Stars

Tuesday, 6.2.09, at 10:00 am

Come enjoy a Saturday Matinee with the family as Fiske shows you the stars and beyond. Each family laser matinée begins with a brief introduction to the night sky and common constellations by a live operator. Come take a musical journey of laser light!

Space Storm

Tuesday, 6.2.09, at 1:00 pm

Explore the Sun-Earth connection with Fiske's newest original production funded by NASA/TIMED and CU's Laboratory for Atmospheric and Space Physics. Learn how sunspot cycles and solar flares affect you!

Colorado Skies: Mars Update

Thursday, 6.4.09, at 8:00 pm

Enjoy a tour of the night sky with one of our astronomers, then shift your gaze to Mars and learn about the latest news about our neighbor planet!

Mars Revealed

Friday, 6.5.09, at 8:00 pm

Explore Mars from a new perspective -- that of the Mars Rovers. Created by CU faculty and students, this show features recent discoveries and analysis from Mars.

Colorado Skies: Extrasolar Planets

June 11, 2009, 8:00 pm

Enjoy this guide to the night sky under the Fiske Planetarium dome, presented by one of our astronomers. Come for a current look at Colorado's skies with a special focus on the developing research into planets outside our solar system.

Space Governance with Phil Smith

June 12, 2009, 8:00 pm

Space governance is the application of systems of governance to space activities to ensure that the use of outer space is safe, secure, sustainable and peaceful.

Colorado Skies: Summer Skies

June 18, 2009, 8:00 pm

Enjoy this guide to the night sky under the Fiske Planetarium dome, presented by one of our astronomers. Come for a current look at Colorado's skies with a special focus on the constellations of summer.

The Milky Way: A City of Stars

June 19, 2009, 8:00 pm

Look into the night sky and see the lights shining from our cosmic neighbors. In this original presentation produced at Fiske, learn about our city of stars-The Milky Way-and galactic neighbors that include nebulae and clusters.

Internet Resources:

STS-125 is returning home on tomorrow (5/22). Time to review the mission at

http://www.nasa.gov/externalflash/hubble_servicing/

Go to <http://spaceflight.nasa.gov/gallery/video/shuttle/sts-125/html/fd4.html> and watch some of the 50 videos the crew made in orbit.

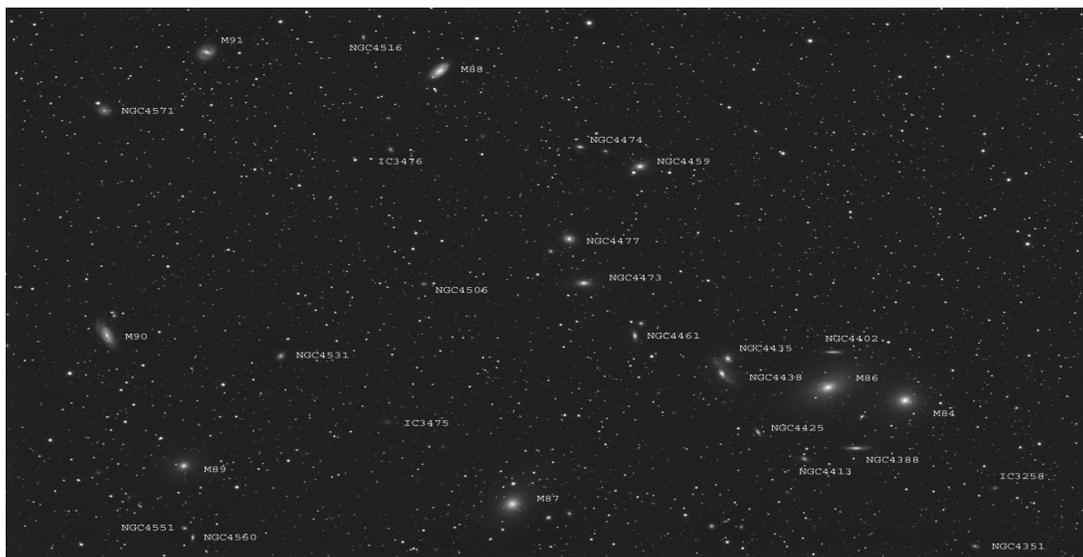
Really looking forward to the next generation of pictures!

Upcoming Space Missions:

Two missions to study the cosmos, the Herschel and Planck spacecraft, are scheduled to blast into space May 14 aboard the same Ariane 5 rocket from the Guiana Space Center in French Guiana. The European Space Agency (ESA) leads both missions with significant participation from NASA. After launch, the missions will separate and proceed independently to LaGrange Point #2.

The Herschel observatory has the unique ability to peek into the dustiest and earliest stages of planet, star, and galaxy growth. The spacecraft's astronomy mirror - about 11.5 feet (3.5 meters) in diameter - is the largest ever launched into space. The mirror will collect longer wavelength light in the infrared and submillimeter range - light never before investigated by an astronomy mission. <http://herschel.esac.esa.int/home.shtml> is the website for more information.

Planck will answer fundamental questions about how the universe came to be and how it will change in the future. It will look back in time to just 400,000 years after our universe came into existence nearly 14 billion years ago in the event known as the Big Bang. The mission will spend at least 15 months making the most precise measurements of light at microwave wavelengths across our entire sky, including the cosmic microwave background. This light is from the primordial soup of particles that eventually evolved to become our modern-day universe. The light has traveled about 14 billion years to reach us, and it has cooled and stretched to longer wavelengths because space is expanding. <http://www.sciops.esa.int/index.php?project=PLANCK> will get you to that website.



One of Brian Kimball's pictures from this month. Markarian Chain of galaxies...

