

Veil Nebula by LAS member Brian Kimball

Longmont Astronomy Society Newsletter
August 2009

From the President:

Reminder to everyone, there no meeting this week at the Front Range Community College as they are between Summer and Fall semesters and are most likely closed. The date also conflicts with opening day of the annual Wyoming Weekend Under the Stars (WUTS). We'll have a brief meeting somewhere in the northeast field at Fox Park on Fri. around 7 pm. Maybe that will satisfy the monthly meeting requirement if the club's charter police happen to be checking...

Next month we'll meet at the regular time and place, 7 pm on Thurs., Sept. 17th, in the community room at Front Range Community College. The speaker will be Bryan White who will present a fascinating stereo slide show about aurora. I'd guess he'll bring along some copies of his excellent book on aurora in case someone wants a copy.

Our wishes, thoughts, and prayers for Carol to get well soon! We'll miss both her and Gary at WUTS this year -- it won't seem like a star party without them.

In the sky this month:

Meteor Showers – nothing major in September. Next biggie is the Orionids on October 21, 2009

Planets:

Mercury: Currently low in the sky, better viewing near the end of the month.

Venus: brightly shining at dawn in the East – who can miss it?

Mars: it's also in the East at dawn (at the feet of Gemini), but dim

Jupiter: near opposition, so it's up nicely by 9 PM for viewing

Saturn: near the horizon at sunset, too low for viewing, and maybe behind a mountain

Interesting Stars/Galaxies

Epsilon Aurigae's Eclipse Begins

July 27, 2009

by Tony Flanders (Sky & Telescope)



S&T: Casey Reed

Robin Leadbeater of Wigton, UK, has reported spectroscopic signs that the long-awaited eclipse of Epsilon Aurigae is beginning.

Epsilon Aurigae is one of the most remarkable eclipsing variable stars in the sky. With most eclipsing variables, two orbiting stars periodically block each other's light as one star passes in front of the other. But in the case of Epsilon Aurigae, the eclipsing object appears to be a huge, elongated opaque disk. Presumably, there must be one or more stars in the disk's center to provide the known mass and keep the disk from flying apart. But then why are they invisible? In any case, Epsilon Aurigae is one of astronomy's great mysteries — and arguably the strangest star that's readily visible to the unaided eye. Astronomers are in urgent need of fresh detailed observations to help them characterize this extraordinary star system.

Club Calendar:

<http://www.allenjeter.com/a4nm-bass.pdf> is the link for Allen Jeter's talk on 7/16, in case you need some review!

On the night of September 2-3, 2009, a remarkable celestial event will take place. From 4:43 to 6:29 Universal Time on the 3rd (which is 12:43 to 2:29 a.m. EDT on the 3rd, or 10:43 to 12:29 a.m MDT on the 2nd), a casual look at Jupiter through a telescope will show no moons at all. It's quite common for one of the four Galilean moons be hidden, and it's not rare to see only two moons. But only a few times in a century do all four moons hide simultaneously behind or in front of Jupiter.

September 17: Regular Monthly meeting at Front Range Community College Community Room at 7 PM. Note: according to the Times-Call, enrollment is up somewhere around 20%, so parking may be a challenge!

Fiske Planetarium: Now as Clickable Links to the information

[Colorado Skies: Life After the Space Shuttle \(with Matt Benjamin\) \(09/03/2009 7:30 PM\)](#)

[Searching for Distant Worlds \(09/04/2009 7:30 PM\)](#)

[Deep Impact \(09/05/2009 2:00 PM\)](#)

[Colorado Skies: Relativity \(with Todd Houghton\) \(09/10/2009 7:30 PM\)](#)

[Mars Revealed \(09/11/2009 7:30 PM\)](#)

[Colorado Skies: Fall Skies \(09/17/2009 7:30 PM\)](#)

[Birth of Stars \(with Dr John Bally\) \(09/24/2009 7:30 PM\)](#)

[Birth of Stars \(with Dr John Bally\) \(09/25/2009 7:30 PM\)](#)

Internet Resources:

Ice Age Impact: Did a comet collision finish off the mammoth / mastodon crowd? The Sept Sky & Telescope has the article, and <http://di.utoronto.ca/journalist/podcast/TUIM.E12.IceAgeImpact.mp3> has the podcast. Listen to it while observing, maybe look for the next impacting comet coming in?

Just discovered <http://www.astronomycast.com/> a series of about 150 podcasts – reputedly pretty popular. If bored, you can try....

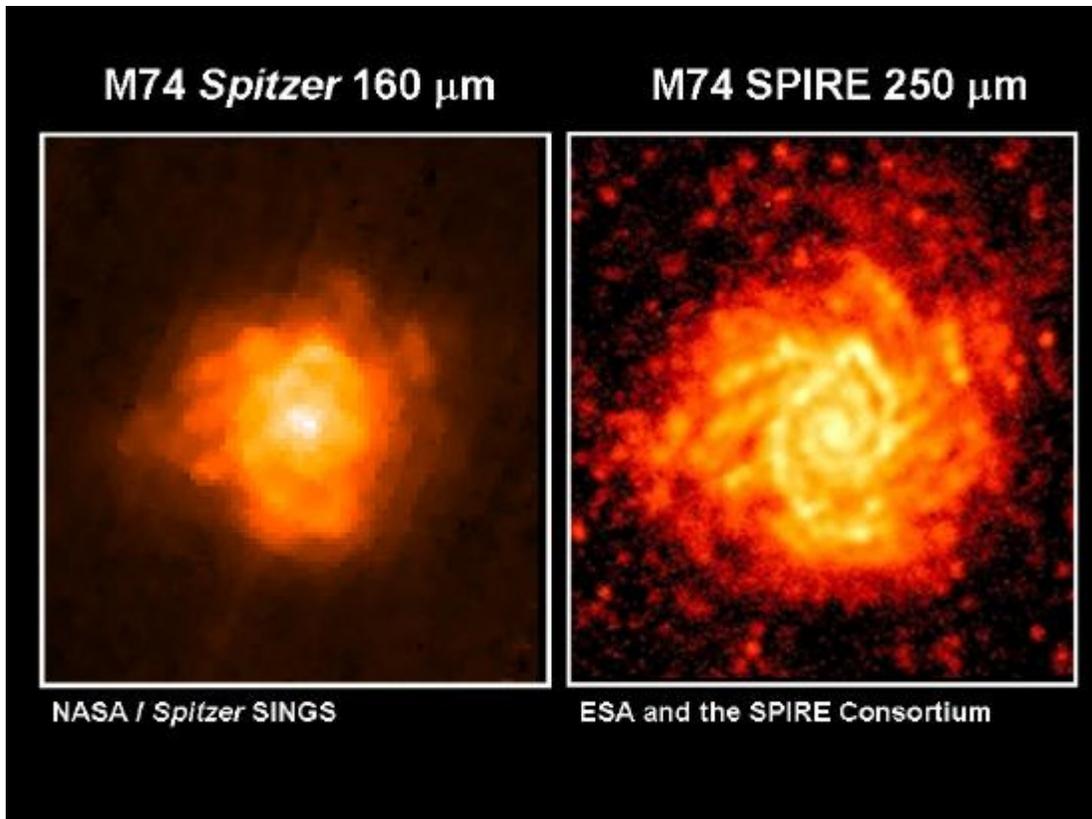
Chandra's Tenth Anniversary! Some details at http://science.nasa.gov/headlines/y2009/19aug_chandra10.htm?list937934

The official site at NASA for the restored video of Apollo 11, etc is at http://www.nasa.gov/mission_pages/apollo/40th/index.html

The Lunar Reconnaissance Orbiter has returned some nice pictures of the Apollo landing site, even to the foot trails left by the astronauts! Check out the materials at http://science.nasa.gov/headlines/y2009/17jul_lroc.htm?list937934

Upcoming Space Missions:

The folks at CU planetary sciences department (professor Jason Glenn) have been working on the SPIRE instrument on the European Space Agency's Herschel mission. The camera is located on the business end of a 3.5 m mirror to observe the “cool universe” at slightly beyond the infrared range. Being high def, it's designed to take the pictures formerly the responsibility of the Spitzer IR telescope to new heights. Launch was on 14th May with the Planck mission, the cryocover opened after electronics checkout on June 14th, and the first light picture followed. The attached picture shows pretty well what “high definition” does to science. Current mission details at <http://herschel.esac.esa.int/>



Note to Vern: How about getting one of these guys to give a talk?

Both Planck and Herschel are heading for separate orbits around the second LaGrangian point. Planck's mission is to get a high definition picture of the Cosmic Background, which is important to a bunch of theoreticians but not going to produce pretty pictures like Herschel.

This month's Wacky Idea:

In the News:

A Sole Retrograde Planet:

Planets orbit stars in the same direction that the stars rotate. They all do. Except one.

A newfound planet orbits the wrong way, backward compared to the rotation of its host star. Its discoverers think a near-collision may have created the retrograde orbit, as it is called.

The star and its planet, WASP-17, are about 1,000 light-years away. The setup was found by the UK's Wide Area Search for Planets (WASP) project in collaboration with Geneva Observatory. The discovery was announced 8/12/09 but has not yet been published in a journal.

COSMIC COLLISION: Evidence is mounting that something did hit Jupiter no more than a few days ago.(July 19, about...) The impact site (a dark "scar" in Jupiter's clouds) was discovered on July 19th by Australian amateur astronomer Anthony Wesley, and NASA astronomers quickly confirmed the find. Infrared photos posted on today's edition of Spaceweather.com are consistent with an asteroid or comet strike on the giant planet. The debris zone in Jupiter's clouds is itself as wide as a small planet, making it an easy target for backyard telescopes.

Other Clubs:

Subject: September Skies Star Stare - hosted by Colorado Springs Astronomical Society

Howdy - would you please pass this on to any interested fellow astronomers!!

The Colorado Springs Astronomical Society (CSAS) is thrilled to announce a new "mini-star-party", called *September Skies Star Stare*.

This event will be held during September's New Moon Weekend. This year, the event will be Thursday, Sept 17, through Sunday Sept 20. To the best of our knowledge, there are no other events at this time in the Rocky Mountain Region. Locals know that September can be one of the best months for viewing - usually the monsoons are gone, the temperatures are still warm, and the night skies are gorgeous!

CSAS is inviting Colorado Residents **only**. Unlike Rocky Mountain Star Stare, there will be no amenities for this event, this is dedicated viewing at its finest! No speakers, no catered food, no tent, but there will be porta-potties! You will have 9 to 10 hours of darkness under some of the best skies in Colorado!

There is no official registration for this event. We do ask however, that you drop an email, **if you are sure you will be attending**, to ssss@csastro.org , just to let us know how many in your party. This is only to insure we have enough porta potties for the event!

There is a very small registration fee of \$10 per person for this event. Payable when you arrive. No pre-registration.

This will be held at Starlight Meadows, the name given to the 35 acres of private land the club owns near Gardner, Colorado. Gardner is located halfway between Walsenburg and Westcliffe, on Highway 69. 2009 was the first year Rocky Mountain Star Stare was held at this site, and the folks that attended just raved about the dark skies!

More information and directions to the site are available at the RMSS website, <http://rmss.org/directions.htm>

There are accommodations available if needed in Westcliffe or Walsenburg, both about 25 miles away. You may camp in your car, a tent, or RV of any size.

Remember, we would like registration information at least one week prior to the event. Please contact ssss@csastro.org for more info, or to let us know you'll be coming!

Thanks,

Al Schlafli
Colorado Springs Astronomical Society

“Capture the Colorful Cosmos” Astrophotography Project

Students, teachers, individuals and families can “Capture the Colorful Cosmos” this summer. From July through September, participants can use MicroObservatory, an online network of robotic telescopes controlled over the Internet.

NASA and the Harvard-Smithsonian Center for Astrophysics invite the community to share views of the universe in this exciting astrophotography project. The images taken using online robotic telescopes will be featured on the NASA and International Year of Astronomy Web sites.

Anyone with an e-mail address can use the MicroObservatory robotic telescopes to request electronic images of astronomical objects. Participants 13 or younger will need a parent or guardian to enter their photos for them. Photos can be taken all summer long. Images must be submitted by **Sept. 30, 2009**, to participate in the project.

Select photos from the project will be featured on the NASA and International Year of Astronomy Web sites beginning on Labor Day.

For more information, visit
<http://www.cfa.harvard.edu/seuforum/iyacocosmos/individual.htm>.