



Hubble Wide Field and Planetary Camera 2 (WFPC2) images of GRB 080319B
(See Internet Resources in this newsletter)

Longmont Astronomy Society Newsletter
April 2008

From the President:

Our next meeting is this Thursday evening, April 17th. Dr. Peter Nelsen, a physicist from the High Altitude Observatory division of the Earth and Sun Systems Laboratory at NCAR, will talk about the “Yerkes Myth” and his group’s proposal to build a huge 1.5 meter F/5 refracting telescope to study the Sun’s corona. Hope to see you there!

The Mountain Area Research Section (MARS) of the Astronomical League has announced new officers. DAS president Wayne Green is chairman, Ginny Cramer is vice chairman, Gene Schimerhorn is treasurer, and I’m the regional representative. I’ll be attending the conference in Des Moines in July. If anyone has some thoughts about ways the Astroleague can improve, please get in touch. MARS will be publishing a newsletter and launching a new website next week.

Last Friday’s Burlington Elementary Starlab turned out to be a very successful and fun event. The sky was totally overcast just a couple hours before it began. It appeared unlikely that we would be able to show anything at all. Fortunately, the sky cleared. Thanks to volunteers Julie Carmen, Marc Wiley, Ken O’Toole, John and Jamie Warren, Gary Garzone, Suzanne Traub-Metlay, Lenoard Sitongia, and Jim Holder.

The next school star party is for the Twin Peaks Charter Academy 3rd grade class from 7 to 10 pm on Friday April 25th at the Jim Hamm Nature Area at 1701 E. County Line Road in Longmont. Telescopes and volunteers are needed as usual. If the weather cooperates, this should be a great event as the Hamm Nature Area is quite dark and the Moon won’t be up until after midnight.

Many interests have been inspired by that first view of Saturn, the Moon, or other object through our telescopes. Some observers are young students and some are older. What is important is that they get a glimpse of the fascinating universe in which they live. Perhaps some will be inspired to do great things.

Congratulations to Brian Kimball for being named as one of the Longmont Times-Call’s top 100 people! LAS members are an invaluable resource to their communities.

In the sky this month:

Meteor Showers

Lyrids night of April 21/22 almost Full Moon and poor observing

Eta Aquarids May 5, morning/evening New Moon and great observing. Best viewing is 1-2 hours before sunrise, couple days before and after May 5th is still good viewing.

Planets

The planet Saturn is high in the southeast at nightfall, and wheels westward during the night. It looks like a bright golden star, with the true star Regulus close by. Small telescopes reveal its largest moon, Titan, which looks like a tiny star quite near the planet. Mars – near the twin stars of Gemini -- Pollux and Castor. The planet Mars is to their west, and looks like an orange star. Passes through the Beehive Cluster (M44) on May 21-23 for some interesting viewing.

Venus - It will disappear from view in early May. In mid-July Venus will reappear in the evening sky, where it stays for the rest of the year.

Mercury – best viewing of the year on May 12-13 at maximum elongation. Look West-Northwest about ½ hour after sunset. Fades fast, but a telescope view will clearly show the crescent. Less than 3 degrees from the Pleiades on May 1-3.

Jupiter – rises about midnight, and is straight south near sunrise. Good viewing in the morning hours. Starts retrograde motion on the 9th of May.

Moon – New Moon on the 5th of May, Full on the 19th. Look bigger? Perigee is on the 5th at 222,309 miles. 3 degrees north of Mercury on the 6th.

Interesting Stars/Galaxies: according to Sky and Telescope, good time to see M51 (Whirlpool Galaxy) in binoculars.

Club Calendar:

In 1609, Galileo first turned his telescope to the heavens and revolutionized humanity's understanding of its place in the universe. In honor of the 400th anniversary of the astronomical telescope, the IYA will feature hands-on workshops and a three-day symposium to help educators, scientists, and anyone working in astronomy and space science outreach to prepare for the 2009 International Year of Astronomy.

The symposium will be held in St. Louis from **May 31-June 4, 2008**.

To learn more about this event and to sign up to receive e-mail updates, visit <http://www.astrosociety.org/2008meeting>.

LASP has launched about 250 sounding rockets since 1947. LASP's Rick Kohnert, who is now at White Sands for the April 10 Launch, will give a talk at the Boulder Public Library's Canyon Theater on May 7 at 7 p.m. titled "From Horseback to Helicopters: A History of Sounding Rockets at the University of Colorado." The Boulder Public Library is located at 1000 Canyon Blvd.

Next club meeting at FRCC: May 15th at 7:00 PM

Next School Outreach: Twin Peaks Charter School at Jim Hamm Park (17th and County Line Rd) from 7:30-9:00 on the 25th.

Regional Star Parties:

Western Nebraska Star Gaze – Scottsbluff, NB May 29-June 1
www.panhandleastronomyclub.com for the information.

Western Colorado Astronomy Club Summer Star Party June 6 to June 8 at the Colorado National Monument near Fruita. <http://www.wcacastronomy.org/page6.html> has the information. Since the site is “accessible by large motor homes”, I’m assuming it’s on the lower parts of the Monument.

Fiske Planetarium:

Take a kid to the show!

Ask for an "Adult Free" coupon at Fiske's ticket window! Anyone under age 18 with paid admission qualifies to bring an adult to Fiske at no cost! You are welcome to photocopy and use these coupons until May 3, 2008.

April 17-18, 2008, 7:30 pm

What happened on the way to the Moon? On the 38th anniversary of Neil Armstrong's famous walk, come learn about one of the most die-hard conspiracy theories that claims NASA faked the Apollo landings.

April 24, 2008, 7:30 pm

Enjoy a tour of the night sky with Justin Searles, then explore some of the fundamental questions of cosmology!

April 25, 2008, 7:30 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.

April 26, 2008, 3:15 pm

Take a journey through the cosmos with intergalactic traveler Lt. Foting in search of a missing intergalactic accelerator suit. As he uncovers the mystery also learn about the science of space travel and the splendors of the universe.

May 1, 2008, 7:30 pm

Enjoy a tour of the night sky with Addie Dove, then catch up with space shuttle servicing missions to the Hubble Space Telescope. Learn more about NASA's manned missions in this exciting talk.

May 2, 2008, 7:30 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.

May 3, 2008, 3:15 pm

Come hear the most popular tales of the night sky. Join our cast of laser hosts as you experience the story of the beautiful princess Andromeda and brave Perseus who saves her from misfortune.

Then we get into the end of the academic year, and shows restart in mid-June.

Internet Resources:

In the news:

Biggest ever GRB: (Newsletter cover photo) A powerful gamma ray burst detected March 19th by NASA's Swift satellite has shattered the record for the most distant object that could be seen with the naked eye. The burst was named GRB 080319B and registered between 5 and 6 on the visual magnitude scale used by astronomers. (A magnitude 6 star is the dimmest visible to the human eye; magnitude 5 is almost

three times brighter.) Later that evening, the Very Large Telescope in Chile and the Hobby-Eberly Telescope in Texas measured the burst's redshift at 0.94. A redshift is a measure of the distance to an object. A redshift of 0.94 translates into a distance of 7.5 billion light years, meaning the explosion took place 7.5 billion years ago, a time when the universe was less than half its current age and Earth had yet to form. This is more than halfway across the visible universe. Video at: http://science.nasa.gov/headlines/y2008/21mar_nakedeye.htm?list937934

When we eventually return to the Moon, we'll need to understand the behavior of moon dust. The Apollo astronauts were covered with the sticky stuff. Read about the experiments going on at http://science.nasa.gov/headlines/y2008/10apr_moon dust in the wind.htm?list937934 (If you go to that site, you can subscribe and get all the articles, not just the ones that I think are cool...)

I must admit that the 3D picture the MRO took of Phobos is astonishing! Put on those red and blue glasses you saved from "Creature from the Black Lagoon" and view the result at http://www.nasa.gov/mission_pages/MRO/multimedia/20080409.html What's with the blue soil, anyway?

This month's Wacky Idea: (Well, not really wacky, but different)

Interacting with the Earth's magnetic field may charge the Moon enough to electrostatically "float" some dust particles above the surface on the dark side. Read all about it at http://science.nasa.gov/headlines/y2008/17apr_magnetotail.htm?list937934 And you thought scuffing your feet on the rug was charging you up.....

Humor Dept:

LONDON, England -- October 2002 - After a year-long search by scientists, the world's funniest joke has been revealed

In an experiment conducted by the British Association for the Advancement of Science, people around the world were invited to judge jokes on an Internet site as well as contribute their own. The LaughLab research, carried out by psychologist Dr. Richard Wiseman, from the University of Hertfordshire, attracted more than 40,000 jokes and almost two million ratings.

The following is judged to be the second funniest joke in the world and has an astronomy overtone:

Sherlock Holmes and Dr. Watson go on a camping trip. After a good dinner and a bottle of wine, they retire for the night, and go to sleep.

Some hours later, Holmes wakes up and nudges his faithful friend. "Watson, look up at the sky and tell me what you see."

"I see millions and millions of stars, Holmes," replies Watson.

"And what do you deduce from that?"

Watson ponders for a minute.

"Well, astronomically, it tells me that there are millions of galaxies and potentially billions of planets. Astrologically, I observe that Saturn is in Leo. Horologically, I deduce that the time is approximately a quarter past three. Meteorologically, I suspect that we will have a beautiful day tomorrow. Theologically, I can see that God is all powerful, and that we are a small and insignificant part of the universe. What does it tell you, Holmes?"

Holmes is silent for a moment. "Watson, you idiot!" he says. "Someone has stolen our tent!"

The above joke was submitted by Geoff Anandappa, from Blackpool in Britain, and was leading the pack when preliminary results were announced in December 2001:

So what is the official funniest joke in the world? Here it is:

Two hunters are out in the woods when one of them collapses. He doesn't seem to be breathing and his eyes are glazed. The other guy takes out his phone and calls the emergency services.

He gasps: "My friend is dead! What can I do?" The operator says: "Calm down, I can help. First, let's make sure he's dead." There is a silence, then a gunshot is heard. Back on the phone, the guy says: "OK, now what?"