



Comet Lulin
Think this is Vern's....

Longmont Astronomy Society Newsletter
February 2009

From the President:

The meeting this Thursday will be about enhancing astronomical images using Adobe® Photoshop (both Elements and CS4). I'll do a presentation about some basics such as removing gradients, neutralizing sky background, and setting black and white points. This is an open forum, workshop style meeting. If you are knowledgeable in use of Photoshop please bring topics to present.

At the March 19th meeting the speaker will be Dr. Bob Stencel from University of Denver Department of Physics and Astronomy. The speaker for the April meeting is Dr. Sean Raymond from University of Colorado Center for Astrophysics and Space Astronomy.

Scopes and volunteers will be needed on Friday March 6 to support a star party at Holy Family High School, 5195 West 144th Ave, Broomfield, CO. From Longmont, go south on 287, and then turn east on Dillon Rd. The Holy Family High School is on the north side of 144th, just east of Sheridan Blvd. Set up near sunset (6 pm) at the east end of the parking lot in front of the school. LAS member Ron Collins is a teacher at the HS and is sponsoring a new science club to help the school emphasize their science program and get students interested in astronomy. About 50 of the 600 students are from Longmont. Please let Gary or myself know if you can help out.

In the sky this month:

Meteor Showers – it's the dead time of the year. Lyrids in April
Planets

Mercury was at greatest elongation on February 13, 26 degrees west of the Sun at dawn and still pretty good in the east.

Venus still the feature of the night sky at sunset, but it's beginning the dive into the sunset, so look quick. Who am I kidding, you look every night when it's clear....

Jupiter and Mars are 0.9 degrees apart on February 16, did you miss it? Of course you have to get up at dawn for that! They're both starting to climb up the sky as Earth overtakes them in orbit and will improve through the summer.

Saturn is rising in the evening and setting about dawn. Unfortunately the rings are still very edge-on.

Interesting Stars/Galaxies

Feb. 16th: Comet Lulin passes Spica in the constellation Virgo. Spica is a star of first magnitude and a guidepost even city astronomers cannot miss. A finderscope pointed at Spica will capture Comet Lulin in the field of view, centering the optics within a nudge of both objects.

Feb. 24th: Closest approach! On this special morning, Lulin will lie just a few degrees from Saturn in the constellation Leo. Saturn is obvious to the unaided eye, and Lulin could be as well. If this doesn't draw you out of bed, nothing will.

Club Calendar & Notices:

The International Journal of Scientific History

“By majority vote of the R. R. Newton Award committee: the R. R. Newton Award for Scientific History has been voted to LAS Webmaster Steve Albers: \$1000. (Does the LAS get any of that?) You can read up on the award and the unearthing of a Galileo discovery at the Journal of Scientific History, December 2008 at <http://www.dioi.org/vols/wf0.pdf>

Participate in Earth Hour by turning out your lights for one hour on Saturday, March 28, 2009 at 8:30 pm. (www.earthhour.org/)

GLOBE at Night, March 16-28, 2009 (www.globe.gov/GaN/)

Fiske Planetarium:

7:30pm Thursday February 19: Leviathans of Deep Space with Dr. Erica Ellingson.

7:30pm Friday February 20: Leviathans of Deep Space with Dr. Erica Ellingson.

Feb 26--Colorado Skies: "E.T. Life" with Matt Benjamin

Feb 27--An IYA Event: "Star Formation with the Spitzer Space Telescope" with "Multi-Wavelength Astronomy" with Dr. Luisa Rebull. As a part of the International Year of Astronomy, we will discuss the efforts of astronomers to study the cosmos in various wavelengths of light (visible, Infrared, X-Ray etc).

Internet Resources:

Dr Bob Stencel gave us a great talk on January 17 for the annual banquet, didn't he? I know a lot of members wanted to get some notes from his presentation, so I begged him for a copy. Highlights:

Starter page for the International Year of Astronomy – 2009 is

<http://www.astronomy2009.org/> The United States is at <http://astronomy2009.us/>

This year's Great World Wide Star Count Oct 9-23, 2009

(www.windows.ucar.edu/citizen_science/starcount/)

400 Years of the Telescope - PBS 9 P.M. April 10, 2009

NASA's website for IYA 2009 <http://astronomy2009.nasa.gov/>

100 hours of Astronomy at <http://www.100hoursofastronomy.org/> is lining up events all over the world for April 2-5. The world map shows Colorado to be totally bare for that weekend, so it's our job to come up with something are get it posted.

Upcoming Space Missions:

NASA's Digital Learning Network is celebrating the launch of space shuttle mission STS-119. The crew of STS-119 includes two classroom teachers who were selected as astronauts in 2004. Scheduled to launch no earlier than Feb. 27, 2009, the STS-119 crew will deliver and install the space station's final truss segment and solar arrays. Join the DLN for the following special event.

Digital Learning Network STS-119 Special Webcast Event -- Feb. 18, 2009, 1:00-2:00 p.m. EST --

This 60-minute videoconference event will feature three distinct segments and live interaction opportunities between in-studio guests and participants at the three selected schools. The three segments will include highlights from the newest DLN module -- Suits: Step Into the Void; showcase the elements and unique features from the Spacesuit and Spacewalking Web site; and discuss the challenges of spacewalking and importance of spacesuits with a subject matter expert from NASA's Johnson Space Center. The DLN event will be webcast to allow broadest opportunity for participation by viewers worldwide. I bet this is going to be on the NASA channel, if you have it on cable or satellite.

To learn more about this event, visit <http://dln.nasa.gov/dln/>.

Visit the Spacesuits and Spacewalks Web site at www.nasa.gov/education/spacesuits.

STEREO's deployment (finished in 2011) on opposite sides of the Sun solves a problem that has vexed astronomers for centuries: At any given moment they can see only half of the stellar surface. The Sun spins on its axis once every 25 days, so over the course of a month the whole Sun does turn to face Earth, but a month is not nearly fast enough to keep track of events. Sunspots can materialize, explode, and regroup in a matter of days; coronal holes open and close; magnetic filaments stretch tight and—snap!—they explode, hurling clouds of hot gas into the solar system. Fully half of this action is hidden from view, a fact which places space weather forecasters in an awkward position. How can you anticipate storms when you can't see them coming? Likewise researchers cannot track the long-term evolution of sunspots or the dynamics of magnetic filaments because they keep ducking over the horizon at inconvenient times. STEREO's global view will put an end to these difficulties. Website at <http://stereo.gsfc.nasa.gov/> with a lot of cool pictures (look a lot like SOHO)

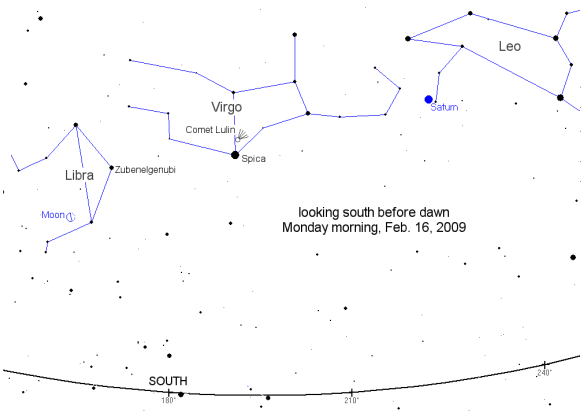
This month's Idea:

The University of Colorado at Boulder, a national leader in aerospace engineering, and SpaceDev Inc., a leading entrepreneurial space company located in Louisville, Colo., have partnered to create eSpace: The Center for Space Entrepreneurship. eSpace is a not-for-profit organization dedicated to creating new entrepreneurial space companies, commercializing aerospace technologies created within these companies and developing the aerospace workforce to support them.

For more information visit the eSpace Web site at <http://www.spacecenter.org>, SpaceDev Inc. at <http://www.SpaceDev.com>, the CU-Boulder aerospace engineering sciences department at <http://www.colorado.edu/aerospace>, Sierra Nevada Corp. at <http://www.sncorp.com> and the Metro Center WIRED initiative at <http://www.metrodenver.org/wired>.



Messier 42 by Alan Jeter



Messier 65 & 66 by Gary Garzone (maybe the PhotoShop presentation will show Gary how to get rid of that line?)

Just in case you get lost looking for Comet Lulin....