Longmont Astronomical Society
January 2018

Photo by
by Tally O'Donnell
LAS Meeting January 20th

The next LAS meeting will be on Saturday, January 20th from 4 to 7 pm at the First Evangelical Lutheran Church, 803 3rd Avenue, Longmont, CO. This will be a pot luck election party! We haven’t done one of these for a long while.

Upcoming Star Parties

For intrepid winter astronomer volunteers there will be star party for the Fairplay Colorado Recreation department on Thurs. Jan. 18th. Fortunately there is a large multi-purpose warm room immediately adjacent the Rec Center’s parking lot to warm up in. If you need a place to stay after enjoying the dark skies, M.J Post has a large cabin nearby; contact him if interested. See announcement on page 8.

January Solar System Highlights

Moon

Full moon: Jan. 1st 7:25 pm
Last quarter: Jan. 8th 3:26 pm
New moon: Jan. 16th 7:18 pm
First quarter: Jan. 24th 3:21 pm

Image Credit Brian Kimball April 4, 2015

There is a total lunar eclipse early in the morning of January 31st. Totality is close to moonset so there is an opportunity to get the mountains in background such Brian Kimball did his image from April 4, 2015.

Penumbral eclipse begins: 3:51:16 am
Partial eclipse begins: 4:48:27 am
Total eclipse begins: 5:51:47 am
Mid eclipse: 6:30 am
Total eclipse ends: 7:07:51 am
Sunrise 7:11 am
Moonset 7:16 am

Mercury

Mercury is naked eye visible for only the first week in January and disappears in the sky glare before sunrise.

Venus

Venus is not visible this month.
Mars

Mars is visible in the morning sky in constellation Libra until the 30th when moves into constellation Scorpio; it increases in brightness from magnitude 1.5 to 1.2. The disk increases in size from 4.8 to 5.6 arc sec across. Best time to view now (Jan 7) is about 5:50 am. Mars will be at opposition with Earth on July 27th.

Jupiter

Jupiter is visible in the morning sky in constellation Libra. It is about magnitude -1.8 in brightness and increases in brightness to magnitude -2 by month end. The disc increases in apparent size from 33 arc sec across to 36 arc sec across.

Neptune

Neptune is visible in the evening sky in constellation Aquarius and is magnitude 7.9 and brightness and its disk is 2.2 arc seconds across.

Saturn

Saturn becomes visible in the morning sky around Jan. 17th. It is in the constellation Sagittarius and magnitude 0.6 in brightness. Its disk is 15 arc sec across.

Uranus

Uranus is visible in the early evening sky in constellation Pisces. It magnitude 5.8 in brightness and its disk is 3.5 arc sec across.

GRS Mid Transits this month based on longitude of 292° (See http://jupos.privat.t-online.de/rGrs.htm )

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Comets

*Comet C2017/T1 (Heinze)* is in constellation Lacerta and is magnitude 9.9; it dims as the month progresses to magnitude 10.1. Coma is about 7 arc min across. Best time to see it is about 6:30 pm (at time of writing Jan 7).

*Comet C/2016 R2 (PANSTARRS)* is in constellation Taurus. It is currently magnitude 10.0 and dims to about 10.1 by the end of the month. Its coma is about 6 arc min across. Best time to view would be about 9 pm (as of this writing Jan 7).
Comet C/2015 O1 (PANSTARRS) is in constellation Hercules this month. It is magnitude 10.3 at the beginning of the month and expected to brighten to magnitude 10.1 at the end.

*M1 “Crab Nebula” by Gary Garzone on Dec. 9*
Overhead Sky 9pm January 15
Star Party

at the

South Park Rec Center

6 - 8 p.m. Jan. 18, 2018*
(Thursday Night)

- See many wonders of the universe - galaxies, planets, star clusters, nebulas, double stars, and craters of the moon.

- Look through large telescopes operated by experienced amateurs from Longmont and Boulder.

- Take advantage of dark skies that are becoming rare, but yours for the taking in Fairplay, at the Rec Center.

- Don't worry about the cold - a warm room with hot chocolate and coffee is available, right next to the 'scopes!

Why is this happening?

We are seeing if there is enough interest in Park County to establish a permanent, non-profit observatory at the South Park Recreation
Above image of Pleiades by Marty Butlen on Dec. 9th.
Below Andromeda Galaxy by Marty Butley on Jan. 9th.
Above: IC 434 the “Horsehead” Nebula in constellation Orion by Stephen Garretson on Dec. 10.
NGC 4565 “Needle” Galaxy in constellation Coma Berenices by Eddie Hunnell on Dec. 12th.