

LAS Newsletter – Sept. 2015

LAS Meeting Thursday September 17th 7 pm

“A Timely Discussion about Time”

by Dr. Suzanne Metlay, Western Governors University

On June 30, 2015, a leap second was added to clocks and calendars worldwide resulting in lots of arguments for and against the whole idea. Let's discuss the geosciences of why we need to adjust clocks based on Earth's rotation rate.

What's the history and future of timekeeping?

Should our perception of time be rooted in astronomy, anatomy, or atomic physics?

And why does it matter how we tell time - is there money at stake?

Join Suzanne Metlay in a lively talk about time and timekeeping in astronomy.

Location

The meeting will be at the IHOP Restaurant, 2040 Ken Pratt Boulevard, Longmont.

Please join us for coffee, dinner, or just desert around 6 pm; The general meeting and presentation will begin at 7 pm.

Upcoming events in September

- Sept. 11th 7:30 pm, Longmont LDS Stake Boy Scouts at Union Reservoir
- Sept. 17th 7 pm, “A Timely Discussion about Time” by Dr. Suzanne Metlay, Western Governors University at September LAS meeting at IHop
- Sept. 21st 7:30 pm, star party for Lyons Elementary School
- Sept. 27th, 7 pm “Watch the Moon Disappear” at Beach Shelter
- Fort Lupton Public and School Library at 7 pm

Aug 20th Meeting Notes

by Joe Hudson

Vern Raben opened and moderated the meeting. Club officers were introduced: Gary Garzone as vice president, Mike Fellows treasurer (absent), Brian Kimball board, Jim Elkins board, Tally O'Donnel board, and Joe Hudson secretary. Agenda for the meeting was announced as well as upcoming events:

- Aug 21 Longmont Library kick off event (7:30 to 9:30) 4 scopes 72 people signed up (expect 80-100) 10-20 per scope, need 3 more assist and scopes)
- Aug 22 City of Superior Recreation Star Party (same as prior location / Colton, Vern will send map)
- Sept 11 Longmont LDS Boy Scouts Star Party at Union Res
- Sept 18 LAS September meeting Suzanne Metlay, Speaker, topic 'Time and Astronomy'.
- Sept 27 Total Lunar eclipse
- Oct 16 City of Louisville Library Star Party
- Nov 7 City of Louisville Library Solar party

Presentation "Beginners Spectroscopy" by Vern Raben

Vern gave a brief outline of some of the discoveries in the development of astronomical spectroscopy. He talked about the "Star Analyzer" a "low cost" way for amateurs to explore spectroscopy with their own scopes.

Business Meeting

- Treasurer's report was given by Vern Raben, reviewed and accepted as submitted.
- Received Horkheimer scope and Celestron eyepiece, phone interviews with Compass and Times Call, all leading to the Aug 21 Night Skies at the Library at 7:30 tomorrow. Arrive prior (7 ish)
- Gary Garzone: Fox Park (many friends attended / mentioned) great time,
- 'Lee's House of Glass' Scope Assembly project: mirrors are back; suggest an assembly party or 'guided assembly' by someone w/ proven expertise (maybe a LAS get together for assembly)

Celestial Highlights

Moon

Third quarter moon: Sept. 6 3:55 am
New moon: Sept. 12 12:43 am
First quarter: Sept. 21 3:00 am
Full moon: Sept. 27 8:52 pm

Mercury

Mercury is visible low in the western evening sky after sunset the first half of this month. It begins the month at -0.2 magnitude and 6.9 arc sec across. It disappears into bright twilight around the 18th.

Venus

Venus rises around 5:30 am in the east before sunrise. It begins the month at magnitude -4.4 and is 45 arc sec across. By the end of the month that decreases to 33 arc sec across and magnitude slightly brighter at -4.5.

Mars

Mars is visible low in the east before sunrise in the constellation Cancer; it moves into Leo on the 5th. It is currently magnitude 1.8 in apparent brightness and 3.7 arc sec across. Mars opposition will be next year on May 22nd. Unfortunately for us by then it will be low in Scorpio so not the best circumstance.

Jupiter

Jupiter becomes visible low in the eastern sky before sunrise. It is magnitude -1.7 in brightness and 37 arc sec across.

Saturn

Saturn is currently visible in the SW after sunset in the constellation Libra. It is magnitude +0.6 in brightness and its disk is 16 arc sec across.

Uranus

View Uranus around 3 am this month in the constellation Pisces. It is magnitude 5.7 in brightness and is 3.6 arc sec across.

Neptune

View Neptune around 12:30 am in the constellation Aquarius. Its apparent magnitude is +7.8 and it is 2.3 arc sec across.

Comets

C/2014 Q2 (Lovejoy) is still the brightest comet currently visible for us in the northern hemisphere. It is in constellation Bootes as the month begins; it moves into Hercules on the 6th and then to Corona Borealis on the 12th. It is magnitude +10.4 at the first of the month and it is expected to dim to magnitude +11.1 by month's end.

Periodic comet 88P (Howell) begins the month at magnitude 10.8 and will dim to magnitude 11.3 at the end of this month. It is in the constellation Aries all month.

Darkness

On Sept. 1st astronomical darkness begins at 9:12 pm and ends at 5:00 am MDT. (7h 48m of astronomical darkness).

On Sept. 30th astronomical darkness begins at 8:19 pm and ends at 5:32 am (9h 13m of darkness).



Total Lunar eclipse Sunday September 27

6:06 pm moonrise

6:11 pm enter penumbra

6:40 pm penumbra first visible

7:08 pm first contact

8:11 pm second contact

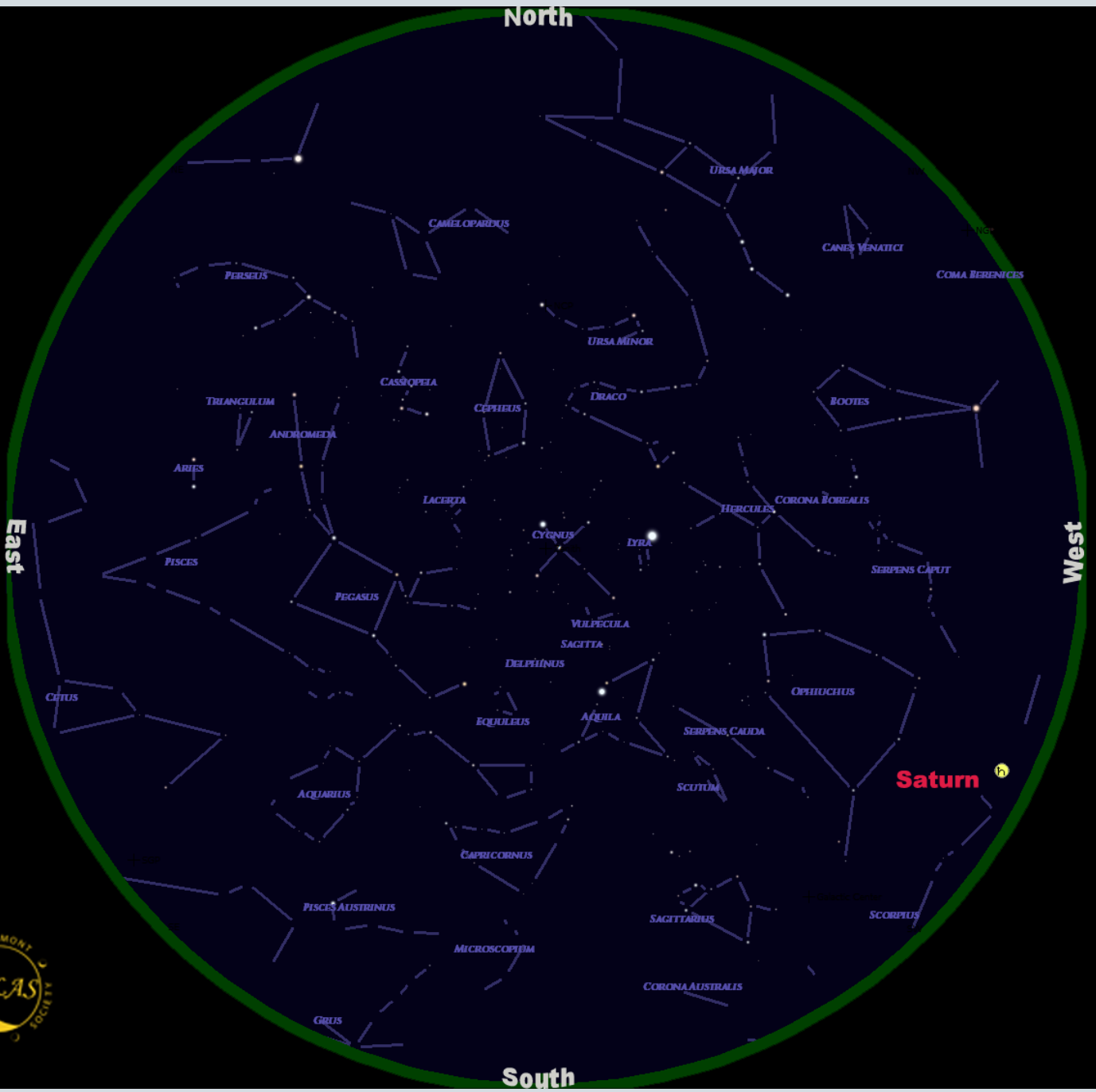
8:48 pm mid-eclipse

9:24 pm third contact

10:28 pm last contact

10:44 pm penumbra last visible

11:24 pm exit penumbra



Our Night Sky Sept 15 at 10 pm MDT





Kick-off Event for LAS Library Telescope Program Photos by Tally O'Donnell on August 21





M27 Dumbbell Nebula by Gary Garzone on Aug 25th



M57 Ring Nebula
by Gary Garzone on Sept. 2nd