

Howard Astronomical League Monthly Meeting

September 11th, 2025

- Introductions
 - Announcements
 - New Monthly Meeting Schedule! (2nd Thursday of the Month)
 - 2025 Star Parties, Recent & Upcoming Events
 - Grand Canyon Star Party 2025 Trip Report Rich Russin
 - SeeStar Very Small Array Project Update Matthew Peters
 - Book of the Month Krystal Rolon
 - Featured Speaker Mehdi Benna, Planetary Scientist, NASA/GSFC
 - What's Out in the Sky This Month...
 - Shallow Sky Jim Tomney
 - Members' Astro-Images and Sketches
 - Wrap-up & Discussion



Special Announcement



If you're here, you got the memo...

HAL's Monthly Meetings will continue to be held on the 2nd Thursday of each Month at 7 PM on Zoom at the Robinson Nature Center in Columbia.

This change is being made to accommodate the schedule at the Robinson Nature Center, which, according to our MOU, allows HAL to use their facilities one evening a month in exchange for our volunteer work at their events

Our Next Monthly Meeting Will be Held Thursday the 9th of October, followed by the 13th of November, etc.

2025 Schedule of Star Parties

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March
  March 8 – Public –
  March 29 - Members
  April 5 - Public (Jupiter/Europa shadow transit)
  April 26 – Members -
May
  May 3 – Public-
  May 24 - Members
  May 31 - Member Mentorship Night
  June 7 – Public
  June 21 - Members
  July 5 - Public (Mercury near greatest eastern elongation)
  July 26 – Members
  August 2 – Public
  August 23 - Members
  September 13 - Public (No moon) Hosts: David Stein, Phil Whitebloom
Chris Todd
  September 20 - Members (Saturn at opposition) Host: Richard Ren
October
  October 4 - Public (International Observe the Moon Night, Moon 93.7% full)
  October 18 - Members
November
  November 1 - Public
  November 15 - Members
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Recent/Upcoming Events

- Star Party Event Held at the Howard Nature Conservancy on 8/29/25
 - About 10 telescopes and over 100 people attended throughout the evening.
 - Good exposure to a new set of people (related to recent uptick in new memberships?)
- Impromptus Held at Alpha Ridge on 8/11, 8/22 & 8/29
 - Thank you to Jose Urias & Ernie Morse for opening the park
 - Reminder, if you would like to be a keyholder, please reach out to a HAL board member to discuss the process
- Next Public Star party is coming up this Saturday, September 13th
- September 20th, Astronomy Festival on the Mall
 - Please see message on the howardastro googlegroup and respond to Victor if you plan to attend
- Solar Science & Engineering Celebration at Glenelg, Oct. 18th
 - Coordinate with Krystal Rolon if interested in participating

ASTRONOMY FESTIVAL ON THE NATIONAL MALL

https://www.hofstra.edu/physics-astronomy/astronomy-festival.html

HOME > PHYSICS & ASTRONOMY - HOME
> ASTRONOMY FESTIVAL ON THE NATIONAL MALL

Saturday, September 20, 2025; 5 - 11 p.m.

4th to 6th Street, SW., on the Mall, in front of the Air and Space Museum; Metro: L'Enfant Plaza



Celebrate the fall equinox with Telescope Views of the Sun, Saturn, Star Clusters, and Colorful Double Stars at the Largest Astronomy Outreach Event in the USA.

Astronomers, astronomy educators, and students volunteer to provide free public science education.

Solar Science and Engineering Celebration

Fun Facts!

- Howard Astronomical Leagues is a participating organization!
- The event is free and open to the public.
- Several "solar viewing" stations will be around campus.
- Join us to celebrate STEM with engineering challenges and demonstrations for K-12.

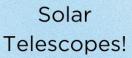


Solar Science and Engineering Celebration!

Glenelg Country School

October 18, 2025 | 12 - 4 PM









Engineering Activities!

Book of the Month

Title:

The Sun

Author:

Brendan Owens

Length:

• 117 pages

Audience Level:

- Beginner Friendly
- Intermediate
- Experienced



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Topic: LEMS-A3

Dr. Mehdi Benna - Planetary Scientist, NASA/GSFC

Dr. Mehdi Benna is a senior planetary scientist at NASA's Goddard Space Flight Center and a research professor at UMBC. His expertise spans plasma physics, planetary magnetospheres, and the development of cutting-edge space instruments. If you've followed missions like MAVEN, LADEE, or the Mars Science Laboratory, you've already encountered the impact of his work.

Dr. Benna has led or contributed to more than a dozen space missions, including the Artemis III Lunar Environment Monitoring Station (our topic for this evening), the SEAL experiment investigating lunar surface interactions, and the MoSAIC spectrometer for the Geospace Dynamics Constellation. His research has been published in over 100 peer-reviewed articles and presented at more than 200 international conferences.

He's also the recipient of multiple NASA awards, including the Exceptional Achievement in Engineering Medal and several Group Achievement Awards for his contributions to Mars, Mercury, and lunar exploration.

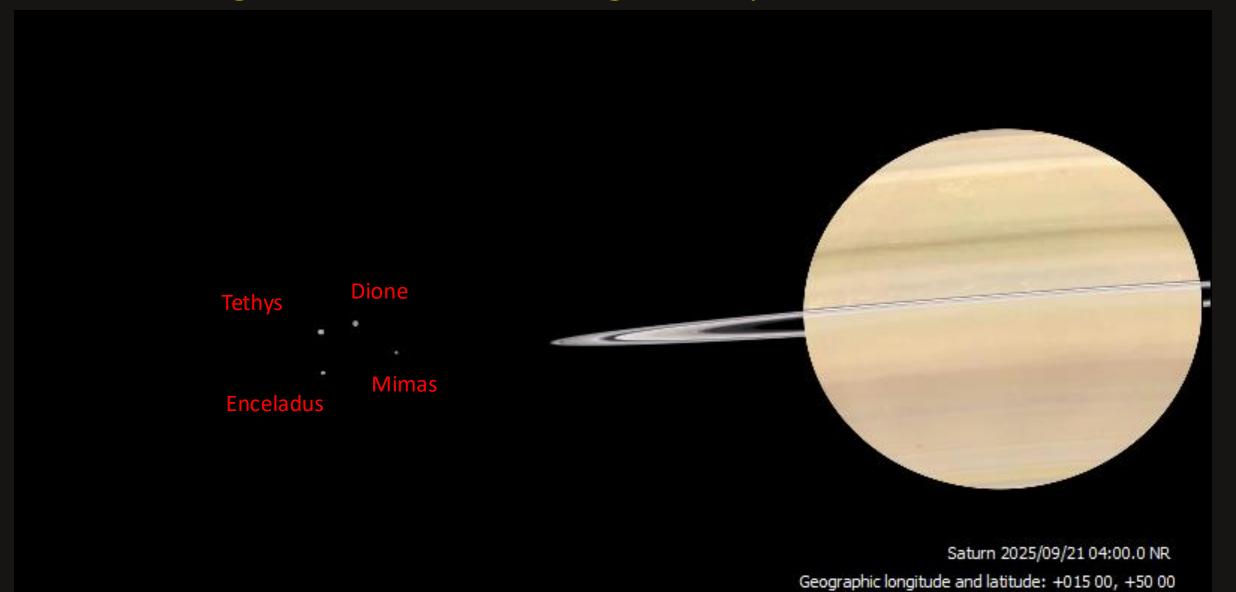
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Saturn at Opposition

- Saturn reaches opposition on the evening of September 21st where it will rise at sunset, set at sunrise.
- Rings are not open very wide, bit this gives you an opportunity to view the globe
- There is also less glare from the rings so you can more easily see some of the fainter moons



Moon Alignment – Midnight Sept 21st



Jupiter Well Placed as Morning Object

- Rising at about 1:30 am now
- The two equatorial bands are broad and pronounced.
- The STB is quite thick in some spots, nonexistent in other latitudes.
- GRS is reddish and about same appearance as last year.



Double Transit Window Opens

- We are entering "Double Transit" season on Jupiter where two of the Galilean moons cross in front of the planet at the same time
- Because Io, Europa, and Ganymede are in orbital resonance with Jupiter, doubleshadow season recurs at 437.64-day (1.2year) intervals.
- The October 4th event has additional interest in how the moons themselves seem to touch one another!

October Double- shadow Transits				
Oct.	Shadows	UT Start	UT End	
4	lo and Europa	6:49	8:17	
6	lo and Ganymede	1:17	1:30	
7	lo and Europa	19:46	21:34	
11	lo and Europa	8:42	10:53	

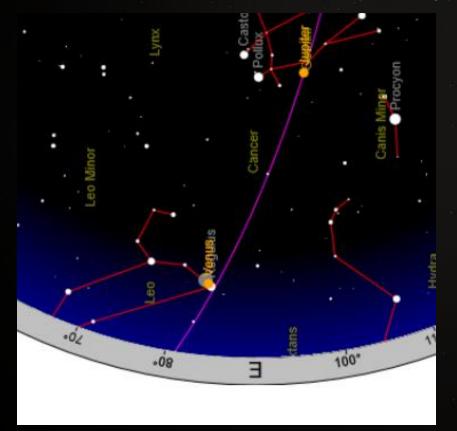
S&T October 2025

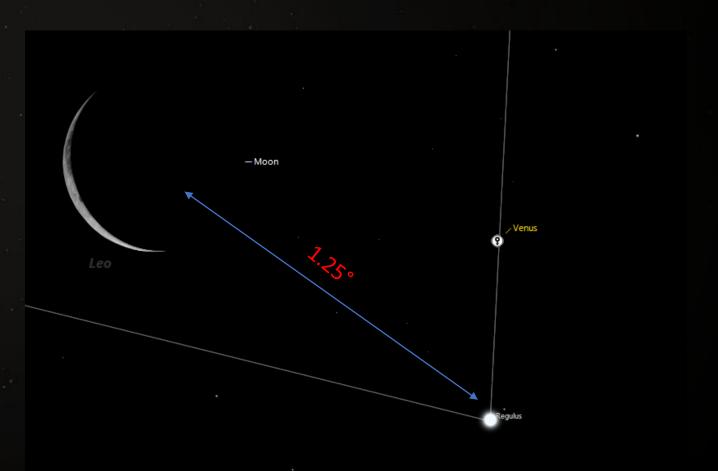


A Subline Appulse on September 19th

- Thin crescent Moon (with earthshine) joins Venus and Regulus
- Need a clear eastern horizon the trio is only about 12° high at 5:45 am (just a few minutes before nautical twilight begins)

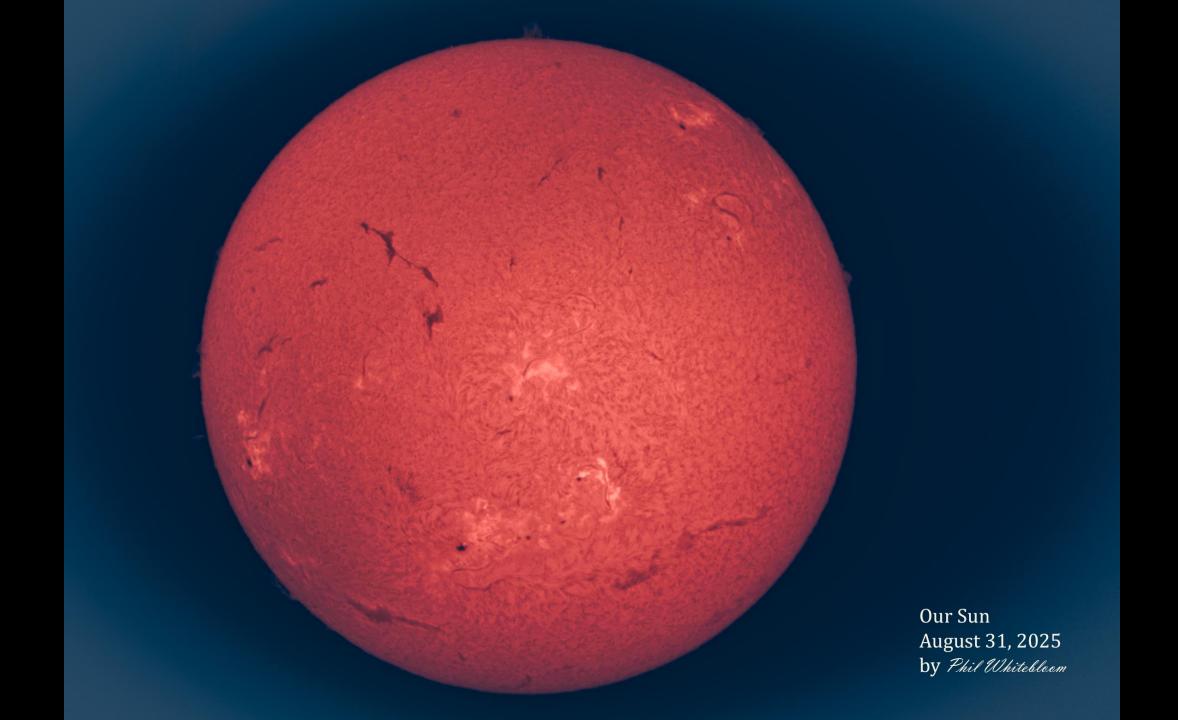
Sunrise at 6:52 am that day)





Tonight's Agenda, September 11th, 2025

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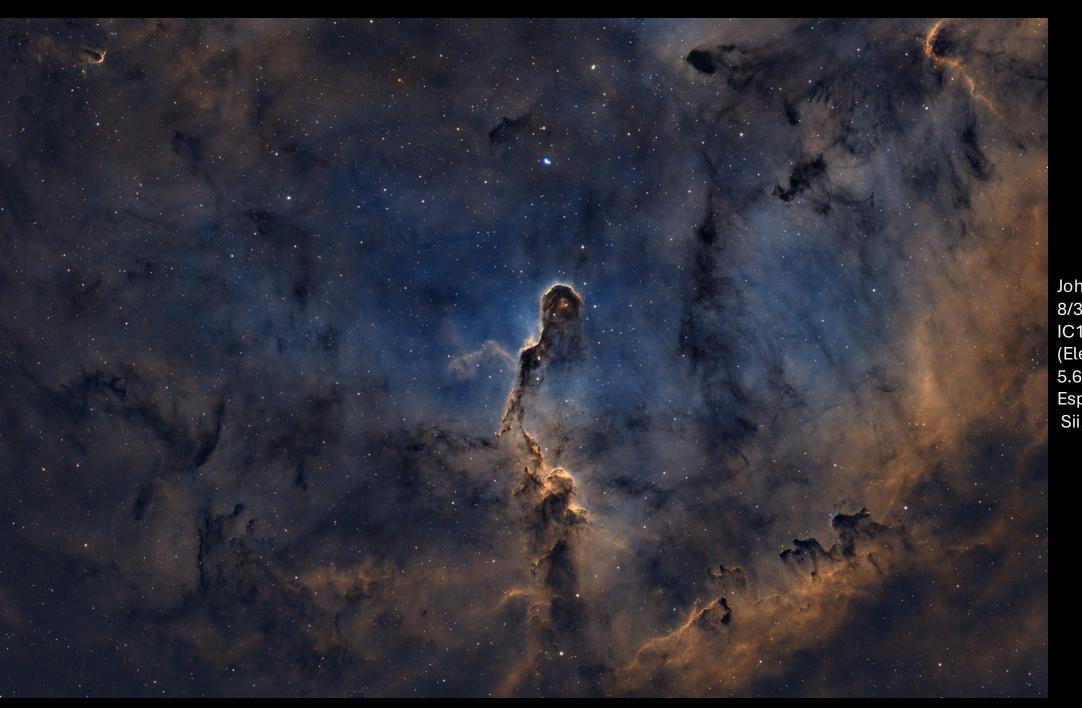




Rich Friedrich 2025 AHSP M27 (Dumbell Nebula) 24 minutes C8 EDGE HD & ASI294MC



Rich Friedrich 2025 AHSP NGC 7331 (Deer Lick Group) 39 minutes C8 EDGE HD & ASI294MC



John Nagy 8/30/2025 IC1396 (Elephant's Trunk) 5.6 hours Esprit 100 & ASI2600MM Sii, Ha, Oiii filters



John Nagy 8/22/2025 WR134 5.8 hours Esprit 100 & ASI2600MM Ha, Oiii filters Mercury 2025-08-23 12:46.5 UT CMI=280° Seeing: 7/10 Trans:7/10





WinJUPOS Simulation

25cm Newtonian f\6, 2.5x TV Barlow R+IR (Baader 685) ASI178MC at 118 fps

Jim Tomney Towson, MD US







Messier 17 "The Omega Nebula"

By: Ken Everhart August 23, 2025 (UTC) Cherry Springs State Park, Pennsylvania

Telescope: CarbonSta
Camera: Zwo ASI16
Processing: Pixinsight
Photosbor

CarbonStar 150 Zwo ASI1600MM Pixinsight Photoshop Elements

 Red:
 10
 X
 60 Secs.

 Green:
 10
 X
 60 Secs.

 Blue:
 10
 X
 60 Secs.

 H-Alpha:
 10
 X
 300 Secs.

 OllI:
 10
 X
 300 Secs.

 OllI:
 10
 X
 300 Secs.

Total: 2 Hours 10 Minutes

C/2025 N1 (Atlas)

23 August 2025 00h 40m UTC

Cherry Springs State Park, Pennsylvania

Seeing: 3-Average

Altitude: 27°

Phase Angle: 96°

Constelation:

Libra

Distance:

242,718,000 Miles

Telescope: Meade LX-850 14" Camera: ZWO ASI2600MM Lum

120 Secs. 100 Gain

Processing: Pixinsight Photoshop.



By: Ken Everhart August 22, 2025 (UTC) Cherry Springs State Park, Pennsylvania

Meade LX-850 14" Telescope: Zwo ASI2600MM Camera: Processing: Pixinsight **Photoshop Elements**

120 Secs. Green: 10 120 Secs. Blue: 10 1 Hour Total:

Thank you