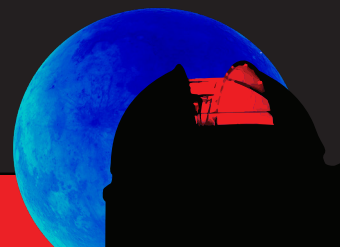


# THE BLUE MOON OBSERVER

JUNE 2024  
Volume 26, Number 6



DOOR PENINSULA ASTRONOMICAL SOCIETY

*Promoting the science and public education of astronomy, encouraging observational participation in astronomy, and providing outreach at the Leif Everson Observatory.*



The Door Peninsula Astronomical Society is a local club and a chapter of the Astronomical League.

DPAS operates and maintains the Stonecipher Astronomy Center and the Leif Everson Observatory, which is equipped with a PlaneWave Instruments 17 inch f/6.8 Corrected Dall-Kirkham Astrograph telescope on a L-500 mount for astrophotography and research. On a portable mount is a 102mm refractor with a hydrogen alpha filter for studying details of activity on the sun.

DPAS also owns and operates a portable planetarium with a state-of-the-art computer projection system which is used on cloudy nights, for daytime activities, and for public outreach in local schools and libraries.



**Stonecipher Astronomy Center,  
Astronomy Campus,  
Leif Everson Observatory,  
and Star Garden**  
PO Box 331  
2200 Utah Street  
Sturgeon Bay, WI 54235



The Stonecipher Astronomy Center under the aurora.

## MONTHLY MEETING JUNE 11, 7:00 PM

### MONTHLY MEETING & PROGRAM: **Apollo—1960's Engineering Challenges of Landing on the Moon.**

VISITORS WELCOME!  
Program presented by  
DPAS member Alec Bath



How do you navigate 240,000 miles, landing two astronauts on the Moon, and getting them back safely with less computing power than a pocket calculator? How does a gyroscope work? What is gimbal lock? What is a correlation algorithm? What modern-day technologies were borne out of the Apollo Space program? Come and find answers to all of these questions and more. Weather permitting, night sky viewing will follow this program.

**Free and open to the public.**

**Meet at the Stonecipher Astronomy Center  
2200 Utah St., Sturgeon Bay**

## OUT THERE

The quest for extrasolar worlds

### VIEWING NIGHT

Join the members of the Door Peninsula Astronomical Society for an "out of this world" experience. The Planetarium show "Out There: The Quest for Extrasolar Worlds" begins at 7:00 p.m., and repeats every half hour. Weather permitting, the Observatory will be open and night sky viewing will begin at dark (around 9:30pm).  
**Free and open to the public.**  
Astronomy Campus  
2200 Utah St., Sturgeon Bay

# JUNE 8

starting at 7:00 PM

## OUTREACH IN MAY



**School Outreach Planetarium Programs**  
Amanda visited Sevastopol and Southern Door Schools.

### MAY 11

**Solar Viewing at Potawatomi Park**  
Viewing Night and Aurora Watching



### MAY 22

**Lunar Watching Program**



### MAY 23

**Solar Watching Program**

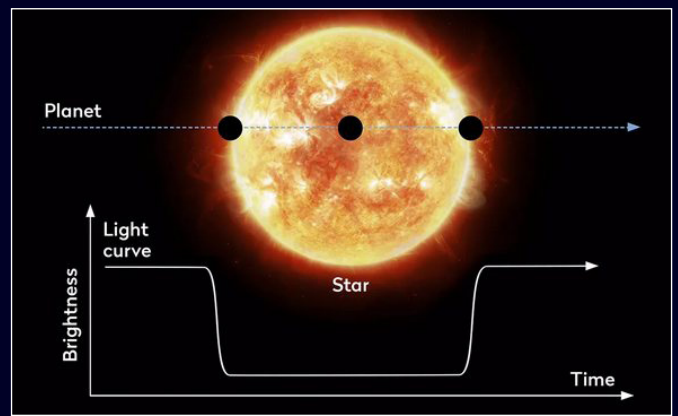
### MAY 30

**Amanda Austin and Jim Gallt on WDOR talk show**

## MEETING HIGHLIGHTS

The May meeting at Crossroads focused on Dark Skies—not ONLY for their negative impacts on astronomy—but because recent research indicates the artificial night lighting affects plant and wildlife. Coggin Heeringa presented a brief overview on recent research on the wildlife.

Following the talk, Amanda Austin described how she used the equipment in the Leif Everson Observatory to gather information about exoplanets. Her research was submitted to NASA and is now on their website.



## A VIEWING NIGHT TO REMEMBER

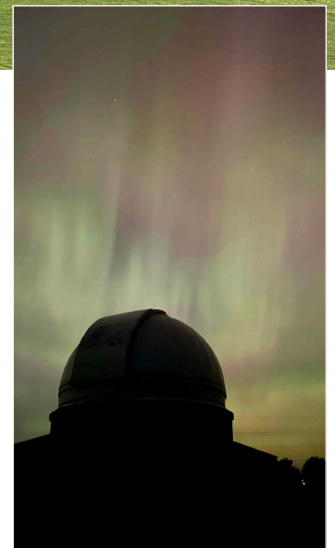


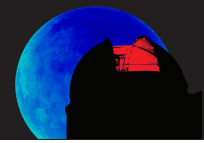
**It's not often we get turnouts as large as the eclipse last month, but we came close on the regular viewing night with the bonus aurora!**

Thanks to Dave (who was between observatory/outside), Jim (outside with guests), Jenny (greeted guests and explained the evening's events), Tom (observatory tours), Coggin (greeting in different areas), Tim (piloting the planetarium), Amanda (the planetarium narrator), "Ray" (our telescope named after our founder), and Rebecca (instructing guests on aurora photography).

**Thanks to all that came to our viewing!**

*We do all this for fun as a hobby—AND to help educate and inspire with the community.*





# MESSAGE FROM AMANDA



Summer has just begun in Door County, and our community is full of daytime activity, with DPAS being no exception. With solar cycle 25 approaching its peak next year, solar activity has been steadily increasing. During solar viewings at Potawatomi State Park and our Astronomy Campus, hikers paused to look through DPAS's solar telescopes, seeing clusters of massive sunspots and magnificent prominences.

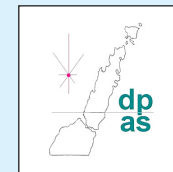
At the May Viewing Night, visitors to our Astronomy Campus saw a specular show in the night sky. In between planetarium shows and tours of the Leif Everson Observatory, they watched the aurora borealis light up the grounds in a stunning display. Over the rest of the summer, the sun's activity promises to be an exciting show.

When the sun sets, the stars make their appearance, and with our research-grade 17" Planewave telescope, DPAS has begun a new kind of night-sky observing: recording exoplanet transits. Our planet Earth orbits one star of many billions in our galaxy, and many of those stars have other planets orbiting around them.

When these extrasolar planets—exoplanets— pass in front of their host star, that star's brightness dims. This dimming can be recorded in a light curve, from which scientists can determine things like the planet's size, its orbital period, and its distance from the host star. Beginning in May, DPAS started recording some of these exoplanet transits, requiring long nights and long hours of processing. This data was then submitted to NASA's Exoplanet Watch program, where it was combined with observations from other astronomers to help scientists get a better understanding of these strange new worlds.

With planetarium shows, solar viewings, open dome nights, exoplanet research, and many other activities in the works, this summer is sure to be an exciting one for DPAS!

Amanda Austin is the DPAS Summer Intern, her employment made possible with grants from **The Women's Fund of Door County** and the **Wisconsin Space Grant Consortium**. Check out the Research Section of the Door Peninsula Astronomical Society webpage to see some of her work.



## BOARD OF DIRECTORS

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SCHOOL COORDINATOR, EDITOR

**Ray Stonecipher**  
IN SPIRIT

The business of the DPAS is largely conducted at the Board meetings to leave the general meetings open for programs. Members of DPAS are invited to attend Board meetings.

# BECOME A DPAS MEMBER TODAY!

## DOOR PENINSULA ASTRONOMICAL SOCIETY MEMBERSHIP FORM

- Lunar Level \$30
- Planetary Level \$50
- Asteroid Level \$100
- Comet Level \$250
- Nebula Level \$500
- Galaxy Level \$750
- Supernova Level \$1000

Please do not list my (our) names in publications.

Mail payment to: DPAS, PO Box 331, Sturgeon Bay, WI 54235

Or, use PayPal: [payments@doorastronomy.org](mailto:payments@doorastronomy.org)

Please print to complete:

ADULTS' NAME (S) \_\_\_\_\_

CHILDREN'S NAME (S) \_\_\_\_\_

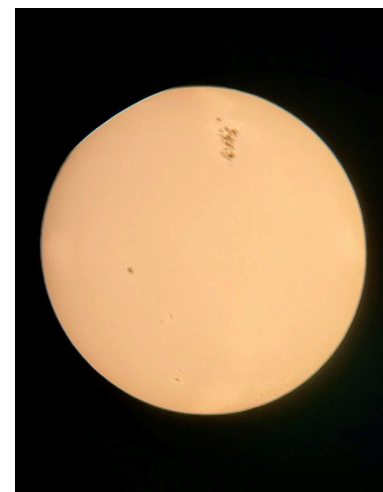
ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE \_\_\_\_\_

EMAIL (REQUIRED TO RECEIVE NEWSLETTER) \_\_\_\_\_



A quick view of a big sunspot through a 10" Dobsonian with an iPhone held to the eyepiece.

# DOOR PENINSULA ASTRONOMICAL SOCIETY

LEIF EVERSON OBSERVATORY & ASTRONOMY CAMPUS 2200 UTAH ST., STURGEON BAY

## ASTRONOMY JUNE

Saturday **JUNE 8** 7:00 PM

### June Viewing Night

See the night sky through our 17" telescope, including deep space objects like galaxies, nebulas, or star clusters! Even if it's cloudy—planetarium shows and campus tours start at 7:00 pm. Sky viewing will begin at dusk, around 9:00 pm.

Meet at the Stonecipher Astronomy Center  
2200 Utah St., Sturgeon Bay

Sunday **JUNE 9** 3:30-4:30 PM

### Planetarium Matinee

See the wonders of the night sky in a planetarium show.

Meet at the Stonecipher Astronomy Center  
2200 Utah St., Sturgeon Bay

Wednesday **JUNE 19** 2:00-4:00 PM

### Solar Viewing Astronomy Campus

Safely see sunspots and solar flares through our solar telescope.

Meet at the Stonecipher Astronomy Center  
2200 Utah St., Sturgeon Bay

**FREE** OPEN TO THE PUBLIC

Saturday **JUNE 8** 2:00-4:00 PM

### Solar Viewing—Potawatomi Park

Safely see sunspots and solar flares through our solar telescope.

Meet at the Old Ski Hill Overlook  
Potawatomi State Park, 3740 Park Dr., Sturgeon Bay

Sunday **JUNE 9** 1:00-3:00 PM

### Solar Viewing Astronomy Campus

Join DPAS at our Astronomy Campus to safely see sunspots and solar flares through our solar telescope.

Meet at the Stonecipher Astronomy Center  
2200 Utah St., Sturgeon Bay

Tuesday **JUNE 11** 7:00 PM

### June DPAS Monthly Meeting

Program: *Apollo—1960's Engineering challenges of landing on the Moon*. If skies are clear, sky viewing to follow.

Meet at the Stonecipher Astronomy Center  
2200 Utah St., Sturgeon Bay

Wednesday **JUNE 19** 6:00-7:00 PM

### Planetarium Matinee

See the wonders of the night sky in a planetarium show.

Meet at the Stonecipher Astronomy Center  
2200 Utah St., Sturgeon Bay

**OPEN DOME  
NIGHTS**

Announced at dusk. Follow Door Peninsula Astronomical Society on Facebook.



DOOR PENINSULA ASTRONOMICAL SOCIETY

Meetings of the Society are held on the second Tuesday of every month at 7:00 PM in the Stonecipher Astronomy Center. 2200 Utah Street in Sturgeon Bay

[WWW.DOORASTRONOMY.ORG](http://WWW.DOORASTRONOMY.ORG)