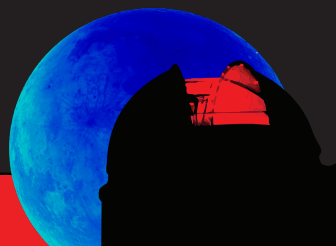


THE BLUE MOON OBSERVER

NOVEMBER 2023
Volume 25, Number 11



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.



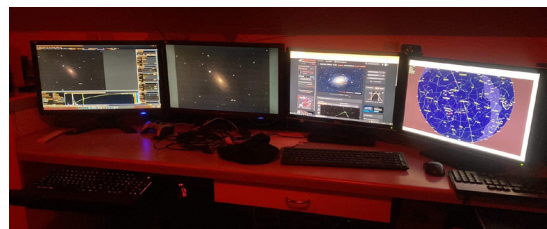
Ray and Ruthie Stonecipher
Astronomy Center,
Leif Everson Observatory,
and Star Garden
PO Box 331
2022 Utah Street
Sturgeon Bay, WI 54235



The Tulip Nebula, DPAS processed by Tom Gwilym



RAY (our telescope)
is now operational!



MONTHLY MEETING NOVEMBER 14, 7:00 PM

PROGRAM: Digital Imaging Basics

The program "Digital Imaging Basics" will be presented by Paul Gruener.

Conditions allowing, we will open the dome for viewing.

Free and open to the public.

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



OUTREACH IN OCTOBER



OCTOBER 6

Art Opening at Ladybug Gallery



OCTOBER 10

October Meeting

Logan Filar presented to a packed crowd.

OCTOBER 14

Viewing Night

Tim Austin created a special Halloween themed Planetarium Show "Spooky Things in Space".



OCTOBER 19

Wisconsin Science Festival Planetarium Show

Tim and Amanda Austin presented a fascinating review of "Time in Space".

MEETING HIGHLIGHTS

BY CRAIG STERRETT

On Oct. 10 Logan Filar offered a presentation on "Artificial Intelligence in Astronomy"

At first, he simply explained the use of AI as "using computers to mimic your mind in a problem-solving way."

He then explained that AI coding can be supervised or unsupervised without intervention. He explained the difference between simpler machine-learning structures that are good at recognizing patterns and making predictions, and complex, deep-learning structures with multiple connections of algorithms in a neural network. Those mimic decision-making in the brain and make multiple connections among computer-coded neurons.

"You can have a 10-by-10 group of neurons, 2-by-2, 50-by-50. The possibilities are really endless," he said.

He also showed the astronomy group an AI he created last year so they could see an example of the code and how it's used. He set up coding to pull NASA-verified data and other tools off the internet and then added algorithms to draw conclusions. He used data from when the Hubble Telescope discovered planets outside Earth's solar system by observing stars and determining whether they dim briefly at regular intervals, which indicated a likelihood of an orbiting planet.

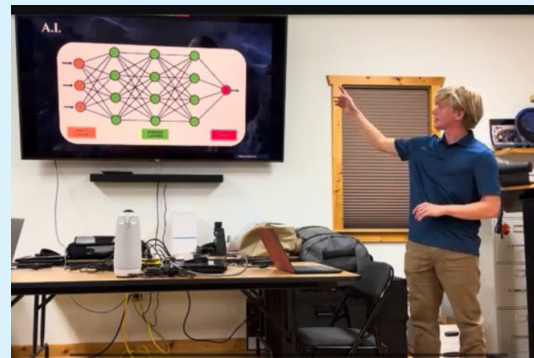
He set up 3,197 points of data, 64 data points at the time, and the data set for known stars with exoplanets – any planets outside Earth's solar system – to see if there were similar "star flux" brightness patterns for other stars tracked by the Hubble. He told the group his code used data that's already there, but the astronomical society could track stars not observed by the Hubble and use the star flux data to determine if those stars have an exoplanet.

He said using the "amazing telescope and photography skills you have here," the Door County astronomers could track stars, discover a planet "and maybe even get a picture of one." An astronomy buff in the audience suggested naming the first found planet "Logan."

Filar got interested in AI while "really bored" in summer 2022, and then found an online class to build his own artificial-intelligence program.

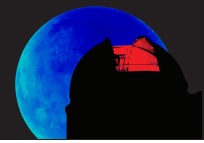
A member of the audience asked Filar if he shared Elon Musk's opinion that AI is out of control, dangerous and developing faster than safeguards.

"I think people have to be careful about what they use it for. The possibilities are endless," Filar said.



Logan Filar, a Sevastopol High School junior approved for graduating with the class of 2024, gives the Door Peninsula Astronomical Society a presentation on how artificial-intelligence neurons work. He developed his own AI coding to track dimming patterns of stars to determine whether they're orbited by planets. Photo submitted to Peninsula Pulse.

This story first appeared in the Oct. 27 - Nov. 3 issue of the Peninsula Pulse, and is reprinted here with their permission. Find more online at doorcountypulse.com.



LETTER FROM THE PRESIDENT



I am happy to report that our first ever image display at Ladybug Gallery in Algoma was a great success. We had 14 of our newest images on display for the month of October and they were well received. Five of the images sold and the rest will be on display at the Astronomy Center for viewing or purchase. They would make a nice Christmas present for anyone interested in astronomy.



As we approach the holiday season, we start to see telescopes showing up in the big box stores. Please do not purchase one of these for a gift. They rarely provide the images shown on the ads and usually end up being donated to our back room until we throw them away. If you are interested in a telescope purchase, please reach out to one of our members. We can help you purchase a good scope for similar dollars that will allow you to enjoy the hobby for years to come.

We have come a long way this year and are putting together our agenda for the upcoming year. We are planning a rather aggressive schedule to showcase all DPAS does in the community, and we will not be able to make this happen without additional volunteers. Please reach out to one of the board members to find out how you can help.

Dave Lenius
President, Door Peninsula Astronomical Society

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Tom Minahan
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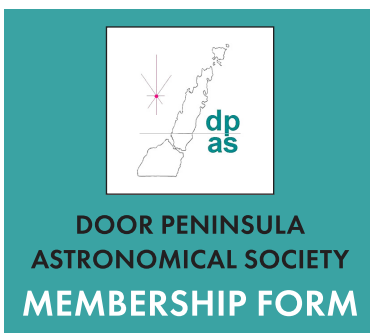
Jenny Austin
MEMBER AT LARGE

Jim Gallt
MEMBER AT LARGE

Coggin Heeringa
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.



Please print to complete:

ADULTS' NAME (S)

CHILDRENS' NAME (S)

ADDRESS

CITY

STATE

ZIP

PHONE

EMAIL (REQUIRED TO RECEIVE NEWSLETTER)

Family \$25 per year

Student \$5 per year

I (we) wish to make a donation of _____ to help underwrite operation costs of the Society.

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



Of course when we give up on a viewing event, the skies open between clouds, the 80% rain doesn't happen, and some views of the eclipse are possible. October 14, 2023

LEIF EVERSON OBSERVATORY & ASTRONOMY CAMPUS

2024 SATURDAY VIEWING NIGHTS

FREE
OPEN TO
THE PUBLIC

Explore the night sky

through "naked eye viewing" and modern telescopes and share the wonders of astronomy with members of DPAS.

If skies are overcast, planetarium shows will be offered in the Stonecipher Astronomy Center.

Dress for the weather.

January 13
February 10
March 16
April 13
May 11
June 8

July 6
August 10
September 7
October 5
November 2
December 7



Watch the DPAS website or follow us on Facebook for Special Astronomical Events

7:00 PM 2200 UTAH ST., STURGEON BAY



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