



**Monthly Notices  
of the  
Everglades  
Astronomical Society**  
Naples, FL  
October, 2024



**Officers: President:** Paul Leopold **Treasurer:** Kathy James  
**Home Page:** <https://evergladesastronomicalsociety.org/Home.php>

### **President's Message**

September 28, 2024

Greetings EAS Members,

I am looking forward to leading The Everglades Astronomical Society in the coming year. I would like to personally thank Robyn and Chris Pritchard for their efforts in running our organization through the challenges of Covid. Chris, as our Tech Master, will support our Zoom meeting format supplementing our in-person meetings at Collier Government Center. EAS is a group consisting of both year around residents as well as seasonal "snow birds". The Zoom technology has made it possible to keep all our members engaged even through the summer low season.

Since joining EAS several years ago, I have had the privilege of meeting some wonderful people and I have made some great friends. I would also like to recognize Rich Sherman who has agreed to step in as our newsletter editor and Kathy James as our treasurer. I am sure their talents will be great assets to the club.

With the dry season commencing around mid-October, we can all look forward to our observing sessions at Big Cypress preserve. The planets will soon be rising in the East and we will hopefully be treated to a bright comet, Tsuchinshan-ATLAS mid-October.

Many astronomy societies and clubs have experienced declining membership since the Covid pandemic. My principal goal will be to promote astronomy to the public at large here in the Naples, FL area. Together we will explore a number of marketing channels to that end. If anyone has ideas supporting that effort, let me know.

Thank you for your support.

Best regards,  
Paul Leopold  
President: The Everglades Astronomical Society

### **A Note on the Monthly Newsletter**

Your articles and images are the most important part of the EAS Monthly newsletter! The submission deadline is the 25<sup>th</sup> day of the preceding month. So, for the November newsletter, please share your articles and images (outreach, club photos & astrophotography) by October 25. Thanks very much.

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### **Next EAS Meeting**

Our monthly meetings are the 2<sup>nd</sup> Tuesday of each month and start at 7pm.

**October 8, 2024: Time 7:00 – 8:00 pm**  
North Collier Government Center  
2335 Orange Blossom Dr., Naples, FL

To participate via ZOOM:

Meeting ID: 349 568 7507  
Passcode: telescope

Please do NOT share this info with non-club members.

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## CLUB NEWS

### The Process to Elect Club Officers and Board Members Starts at the October Meeting

The EAS Board must soon be re-elected and a timeline for that process has been identified.

- At this month's (October) meeting, we will decide on the size of the board (4 or 5 individuals) and the length of their terms (1 or 2 years). Also, those interested in joining the Board will be asked to submit a brief bio (to include their astronomical interests, experience with EAS or other clubs, etc.) by November 1, 2024 to Paul Leopold at [paul@theleopolds.net](mailto:paul@theleopolds.net).
- At next month's (November) meeting, a list of board candidates and their bios will be distributed along with a ballot to select the new Board members.
- At the December meeting we will conduct the formal vote. Those who did not attend the November meeting will receive a copy of all materials, including the ballot at the December meeting.
- The club will install the new Board at the January 2025 meeting.

At the October 2024 meeting, we will also discuss proposed EAS officers. Club President Paul Leopold has proposed this slate of positions.

- President: Coordinates and conducts monthly meetings, public star parties and the efforts of the board. This is currently Paul Leopold.

- Vice President: the sole responsibility will be finding and coordinating monthly meeting programs.
- Treasurer: collects dues and prepares monthly treasurers report to the members. Currently, this is Kathy James.
- Newsletter Editor: Self-explanatory, content includes treasurer report and summary of board activities. Currently, this is Rich Sherman.
- Secretary: position may be added if the board structure is approved and board conducts business outside regular monthly meeting.
- Observing Coordinator: organizes observing events for members and outreach programs. Currently, this is Mike Usher.

### EAS 2024-2025 Dues

The fourth quarter is membership renewal season. Before year end, please bring \$20 to a club meeting or mail your check to:

*Kathy James*  
270 Naples Cove Dr #3206  
Naples, FL 34110

### Big Cypress and Other Viewing

We have the following Outreach dates with the public at Collier Seminole. Please come out, bring your telescope and enjoy sharing the skies with our community:

November 30, 2024  
December 28, 2024

A note of apology from your editor. Last month, I referred to our handy EAS app as "Discord" which is the name of the app we use for my club up north to coordinate viewing. The EAS's app is named "**GroupMe.**" Members use the GroupMe app to share news and weather and to coordinate impromptu trips to Big Cypress for viewing and astrophotography. If you have not already done so,

please download the app. New members should contact Chris Pritchard to ensure you are added to our group.

### Comet C/2023 A3 (Tsuchinshan-ATLAS) offers great viewing this month

Just after our October meeting, Comet C/2023 A3 (now being referred to by some as the “Comet of the Century”) sweeps back into view in the western sky just after sunset. It will make its closest approach to Earth at 44 million miles on October 12<sup>th</sup>, but will be only about 5 degrees above the western horizon one hour after sunset. Comet C/2023 A3 will continue to rise while dimming until its last day of visibility on October 30<sup>th</sup>. This suggests the first 7-14 days might be a great time for viewing. It is estimated to have an extremely bright magnitude around -4.3 to -4.7 (source: space.com). For reference Venus has a magnitude of -4.6 at its brightest (source: NASA). This comet originates in the Oort Cloud and visits the inner solar system once every 80,000. So, if you miss it this time, check here for our next update on Comet C/2023 A3 in our October 82024 newsletter.

### Astrophotography Trip to Chile

An exciting opportunity has emerged recently to photograph the southern skies. EAS fellow member, Monica Starks, is leading an astrophotography travel group to San Pedro de Atacama in Chile from September 18-26, 2025. Space is limited with only 10 openings left as of this newsletter. You can get all the details from Monica at: [monica@ishootphotographytravel.com](mailto:monica@ishootphotographytravel.com).

### Eclipses

The next total lunar eclipse visible in both US and Europe will be 3/14/2025. Unfortunately, there is not another total solar eclipse in the continental US until 2044. However, Europe—and specifically southern Spain—will experience a total solar eclipse on the evening of 8/12/2026.

Here is a list of future US solar and lunar eclipses: <https://www.timeanddate.com/eclipse/in/usa>

You can see a list of upcoming solar and lunar eclipses in Europe here:

<https://www.timeanddate.com/eclipse/list.html?region=europe>

### **Dark Sky Update By Rich Sherman**

Did you know...

- More than 171,330 square kilometers of land has been protected for dark skies across 32 countries and 6 continents
- Twenty new International Dark Sky Places were approved last year, including eight locations in the US. One of them is Groveland FL, which is just west of Orlando. The Central Florida chapter of the International Dark Sky Association worked with the city of Groveland to adopt a dark sky ordinance that preserves its view of the Milky Way, while also reducing coast and saving energy.

I recently registered for the annual “Under One Sky” virtual dark sky conference which is November 8-9 this year. The conference is packed with useful information, including information on personal safety and health, and features many different speakers. Register for \$25 at: <http://conference.darksky.org>.

Other dark sky news can be found here

<https://darksky.org/news/paonia-colorado-becomes-newest-international-dark-sky-communitypaonia/>

<https://darksky.org/news/darksky-endorses-the-dark-and-quiet-skies-act/>

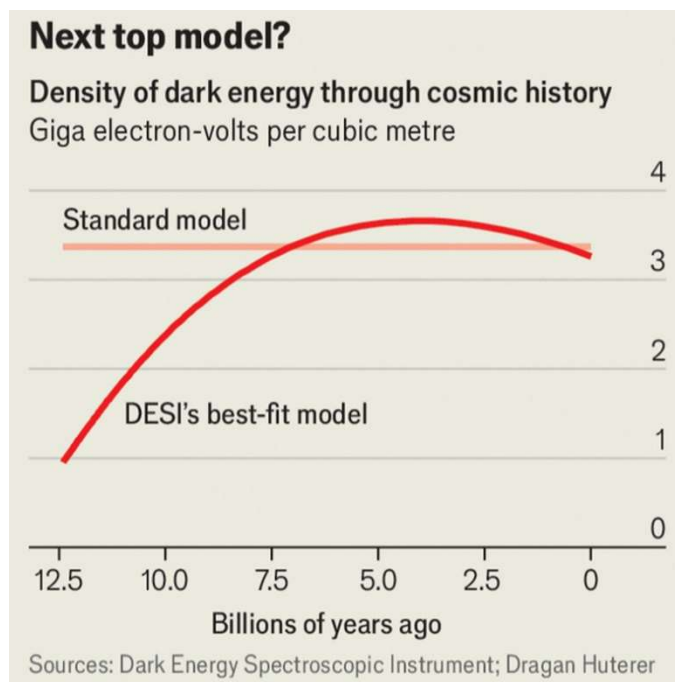
### **Dark Matter Article By Rich Sherman**

*“Perhaps, says DESI’s scientists, the density [of dark energy] is changing over time.... If the findings prove true, it would catapult cosmology into a crisis.”*  
--The Economist

Dark energy, which is the name given to the unexplained repulsive force pushing matter apart,

comprises about 68% of the universe, The Dark Energy Spectroscopic Instrument (“DESI”) at Kitt Peak National Observatory has spent years studying this force and preliminary results were published at the 2024 American Physical Society’s annual meeting. The data suggests that dark energy has not been a constant: it became denser until about five billion years ago and it is now weakening. If accurate, this creates great problems for the standard model of cosmology, for Einstein’s Theory of Relativity, and for the expected fate of the universe. The widely-accepted theory is that the universe will end as a cold vacuum, but now the possibility of a Big Crunch (the universe contracts back to a singularity) or the Big Rip (space is ripped apart) are now back on the table.

The chart below is from The Economist. As a subscriber, I can share five free articles per month, so if you would like a copy, please email Rich Sherman at [rjsherman@hotmail.com](mailto:rjsherman@hotmail.com).



Source: *The Economist*

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## ASTRO NEWS & NOTES

### “Star Parties”

- Last month, Mike Usher reminded us that registration opened on October 1<sup>st</sup> for the upcoming Winter Star Party that runs 1/27/25 to 2/2/25. The event is held at the Girl/Boy Scout camps on Scout Key. The skies are pretty dark and you will have an excellent view of the Southern Cross, among other deep southern sky sights. Participants can also stay offsite but hotel reservations should be made NOW. As a third lodging option, the Winter Star Party has a limited number of huts available in which you can stay in (comparative) luxury. Campers have a choice of which camp to stay in: Wesumkee, the Girl Scout camp, has no electricity and almost no water, or Sawyer, the Boy Scout camp, which has (limited) electricity and showers. Attendees at Wesumkee can just walk to the showers as needed. People driving RVs are required to stay in Wesumkee, generally the tent campers prefer to stay in Sawyer.

- Joshua Tree Night Sky Festival (29 Palms, CA) 10/4/2024-10/5/2024, more info at <https://www.skysthelimit29.org/night-sky-festival.html>
- Texas Star Party (90 mins. SW of Dallas): 4/24/2025 to 4/27/2025, more info at <https://texasstarparty.org/>
- Grand Canyon Star Party (Grand Canyon N.P.): 6/21-6/28/2025, more info at <https://www.nps.gov/grca/planyourvisit/grand-canyon-star-party.htm>
- Green Bank Star Quest (West VA): 6/25/2025-6/28/2025, more info at <https://greenbankstarquest.org/>
- Stellafane (Vermont): first week in August, more info at <https://stellafane.org/convention/>

### Articles of Interest

Sky and Telescope report Meade and Orion may have ceased operations:

<https://skyandtelescope.org/astronomy-news/meade-and-orion-cease-operations-maybe/>

Stranded astronauts sad to see their damaged spacecraft leave:

<https://www.bbc.com/news/articles/ckgn1125ne3o>

SpaceX launches from Cape Canaveral to recover stranded astronauts:

<https://www.bbc.com/news/articles/cy89kz8ge41o>

Hubble Transitions to Single Gyro:

**ASTRO IMAGES FROM EAS MEMBERS:**

For inclusion in future newsletters, please send your images to Rich at [RJSherman@hotmail.com](mailto:RJSherman@hotmail.com). Please include at a minimum:

- the name and/or catalog number of the object (e.g., “M33” or “Triangulum Galaxy”)
- the date of the image
- the location where you took the image
- the telescope you used to take the image
- 

Additional information such as the camera, the number of frames, the filter you used, the number of exposures, and the length of each exposure are also very welcome.



Ted Wolfe  
Western NY

Its LDN43 (Lynd's Dark Nebula) located in Ophiuchus.  
It's called the "Cosmic Bat" for obvious reasons.



Andromeda by Bob Gurnitz  
Seestar S50  
September 12, 2024  
Chappaquiddick, MA



The Moon by Henri Troch  
Location: La Londe les Maures, southern of France  
Equipment: Nikon D7500 at 200mm



North America + Pelican + Alligator Nebulae by Armando Merio  
Ontario, CN  
Canon EOS Ra with Canon FD 300mm at F/2.8  
Exposure: 20" x 16



NGC457 (NGC436), By Vic Farris

Date: 08-27-2024

Constellation: Cassiopeia

Location: Murfreesboro, Tennessee

Telescope: Sky-Watcher Esprit 100ED Refractor

Camera: ZWO ASI2600MM

Filter(s): Antlia Red, Green, Blue

Exposure/Integration: 30 x 30 seconds each R, G and B (0.75 Hours total integration)

Processing: RGB

Software: PixInsight





SH2-155 Cave Nebula by Vic Farris

Date: 07-31-2024 and 08-03-2024

Constellation: Cepheus

Location: Murfreesboro, Tennessee

Telescope: Sky-Watcher Esprit 100ED Refractor

Camera: ZWO ASI2600MM

Filter(s): Antlia 3nm SII, Ha, & OIII

Exposure/Integration: 35 x 300 seconds each S2, Ha and OIII (8.75 Hours total integration)

Processing: SHO/RGB stars

Software: PixInsight

Sh2-155 is a diffuse nebula in the constellation Cepheus, within a larger nebula complex containing emission, reflection, and dark nebulosity. It is widely known as the Cave Nebula. Sh2-155 is an ionized H II region with ongoing star formation activity at an estimated distance of 725 parsecs (2400 light-years) from Earth. Although

Sh2-155 is relatively faint for amateur observation, some of its structure may be seen visually through a moderately sized telescope under dark skies.



Sh2-132 (the Lion nebula) by Eric Uthus

Date: 09-05-2024 and 09-06-2024

Constellation: Cepheus

Location: Glenwood, MN

f4.14 Newtonian

Player One Poseidon-C Pro camera with or without the Player One Anti-Halo Ha/OIII filter.

74 x 300 seconds OSC, 137 x 300 seconds Ha/OIII.

Note: this image contains the planetary nebula PNG101.5-00.6, which is the bluish small smudge at far right of the image, about  $\frac{1}{4}$  way up.