CACHE VALLEY ASTRONOMICAL SOCIETY
cvas-utahskies.org

CACHE VALLEY CLEAR SKIES

Journal of the Cache Valley Astronomical Society

Volume 11 No. 03 November 2, 2023 https://cvas-utahskies.org

PRESIDENT'S CORNER

by Dell Vance

Ann-Maree Vance

October was another busy month for the club. We had three star parties scheduled. Two were successful and one we had to cancel due to thunderstorms. We also had an annular eclipse to enjoy. Several members traveled to central Utah to witness the eclipse. The October club meeting was a recap of the sun and the eclipse. Bruce Horrocks presented information about the sun and light in general. We then had members relate their experiences with the eclipse. I travelled down to Fillmore and had a great experience there. My daughter and I were the only ones in the large parking lot we were in with telescopes. I had my 6-inch SCT, a 80mm refractor, binoculars, and my camera, all with solar filters. We were very popular. Overall, it was a great month.

In November, we have a STEM Fair for Summit Elementary in Smithfield. The monthly meeting will be on November 10 at the USU Engineering Labora-

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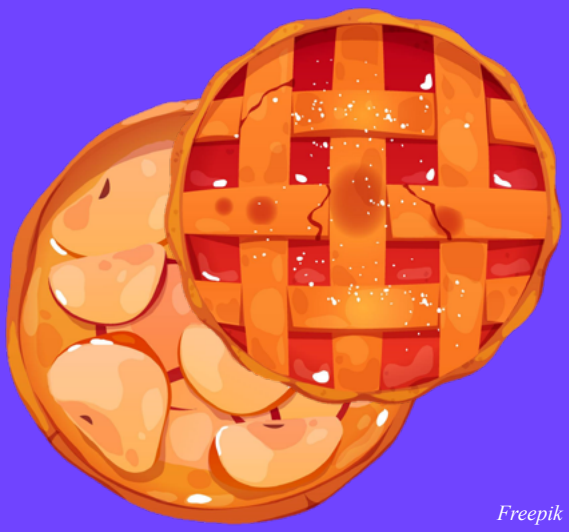

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UPCOMING EVENTS

- Nov. 5: Daylight savings time. "Fall back" to standard time.
- Nov. 10: Club meeting, 7:00 p.m. at USU Engineering Lab, room 107. Speakers TBA.
- Nov. 11: Veterans Day. Thank you for your service! We love our astronomy vets!
- Nov. 14: STEM Fair at Summit Elementary (Smithfield).
- Nov. 23: Thanksgiving Day
- Dec. 21: Winter solstice
- Dec. 29: Club holiday party! Mor details forthcoming.

Check your email for more info about upcoming events!

Keep up to date by visiting our website:

President's Corner, cont'd from p. 1

Annularity's beginning, middle, and end; images taken from Fillmore, Utah, on October 14, 2023.

tory Building Room 109. We have incorporated two presentations. One is by Lyle Johnson, CVAS member, about the basics of astronomy. This is to help those that are just starting out in amateur astronomy. It includes visual astronomy, as well as astronomy aided by binoculars and telescopes. The other presentation is by Paul Rickets, of the University of Utah, which is an update on the remote telescope that the U of U operates down in a remote location in central Utah. Paul is very knowledgeable about this telescope and the things they are learning from it.

We appreciate all the great work that you are doing. All three of the star parties had at least six telescopes there. That is very impressive, especially when you consider how variable the weather can be here in the valley. We have a great group to provide outreach to our community.

Thanks again for all your support.

Clear Skies,
Dell Vance

Images courtesy of the author.

CACHE VALLEY ASTRONOMICAL SOCIETY

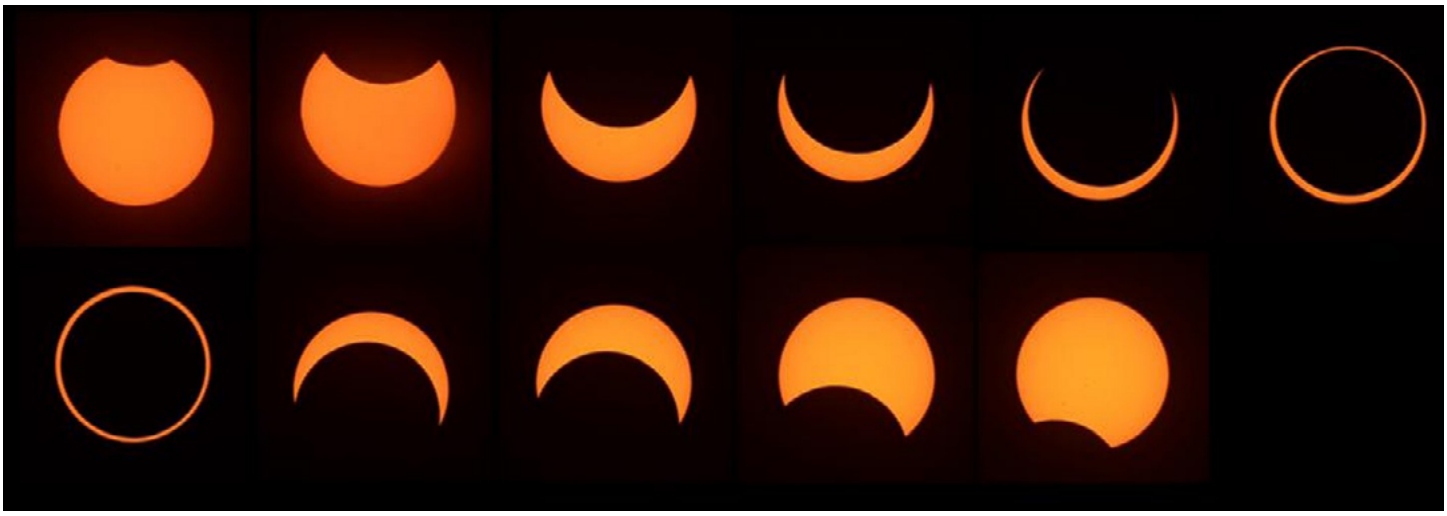
Our Website: CVAS-UTAHSKIES.ORG

EXECUTIVE COMMITTEE

- President: Dell Vance; avteam.dell@gmail.com
- Vice President: Dale Hooper; dchooper5@gmail.com
- Secretary-Treasurer: Bonnie Schenk-Darrington; bschenkdarr@gmail.com
- Night Sky Network Coordinator: Dell Vance; avteam.dell@gmail.com
- Public Relations: Bruce Horrocks; bruceh@gembuildings.com
- Webmaster-Librarian: Tom Westre; twestre45@aol.com

"A CHEER WENT UP FROM THE CROWD": MY ANNULAR ECLIPSE ADVENTURE

by Blaine Dickey



Progression of the annular eclipse as viewed through an 80mm scope; images taken from Kanosh, Utah, on October 14, 2023.

On Saturday morning, my wife and I left our hotel in Nephi Utah at around 7:00 a.m. We hoped that would put us in Kanosh, Utah, a little after 8:00 a.m., giving us enough time to set up our scopes before the eclipse started at little after 9:00 a.m.

We noticed immediately as we entered I-15 that the traffic was quite heavy. In fact, we could see tail lights ahead of us in both lanes as far as the eye could see. This was alarming to me because we were still too far north to see the total annularity. More troubling was the clouds that were quickly filling the sky as we headed south. We also hoped the traffic would not be an issue between where we were then and our final destination.

As it turned out there was no stopping this traffic. They were determined to get to their destinations in time for the eclipse. To our relief, many of the cars eventually turned off the freeway to the road leading to Richfield.

We continued south on I-15 until we reached the exit at Meadows. As we passed by the park in Meadows, we noticed groups of people there, with some of them setting up scopes. I thought about stopping there instead, but continued to head eastward towards Kanosh. On our way, I noticed someone setting up his equipment on the side of the road. We passed him by and continued until we came into the small town of Kanosh, Utah.

We drove until we saw the city park and turned into it. We saw a parking lot where some people had already set up their equipment. I looked over at the park and noticed groups of people getting ready to watch the eclipse, but I also noticed some large trees to the east that would block the sun as it rose above the mountains. We decided to set up in the parking lot, where we had a clear view of the sun.

I set up my 8-inch Celestron and 80mm refractor, with a camera on each. The camera on my large scope was attached to a laptop and a large monitor. A car parked next to us as we got ready for eclipse. They were young people who had traveled from Salt Lake City; their group consisted of persons from Kenya, Tanzania, and South Africa. They told me when they saw our setup that this was where they wanted to stay and watch. Later, I invited them to watch the eclipse with us and they accepted. It turned out that, while I was taking images with my large scope, one of the gals in the group took over my DSLR, which was mounted on my 80mm refractor, and took several great images during annularity. I was grateful for her assistance.

As the eclipse began, we were bothered by some clouds low in the east that blocked the sun but they

cont'd on p. 4

A Cheer Went Up, cont'd from p. 3

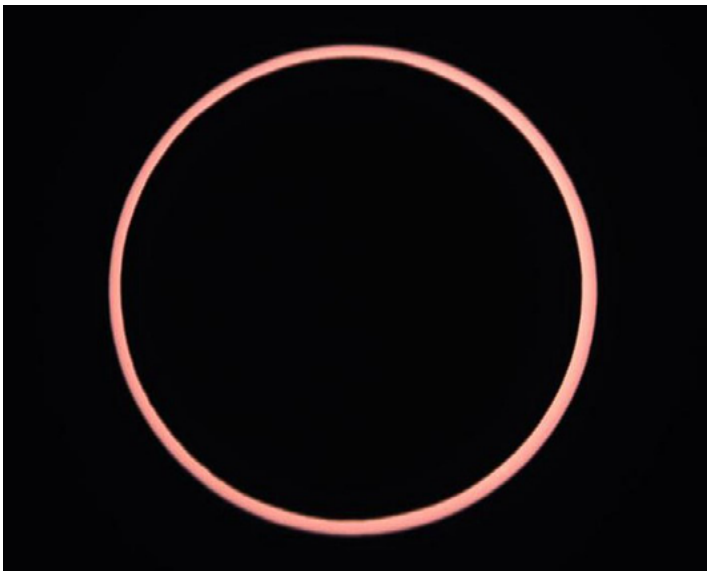
gradually began to clear shortly after that. Things went quite smoothly from then on. We had several other groups and families that stopped by to watch the eclipse as it progressed. They asked us many questions during the event.

As the eclipse progressed, the sky noticeably darkened, the temperature fell, and the shadows sharpened. But, forming our hands just right, we could see crescents of the eclipse on a piece of paper placed on the hood of our car. As the sky continued to darken, we noticed the planet Venus shining brightly above and to the west of the sun. When the moon passed inside the sun, a cheer went up from the crowd, both in the parking lot and the park. Shortly after the annularity ended, we heard three large explosions celebrating the eclipse.

I continued to take pictures until the last edge of the moon disappeared from the sun. One person we talked with after the eclipse mentioned she had taken over 1,000 images of the eclipse on her phone.

Overall, it was a great experience for my wife and me, and we thought it was well worth the effort. I was able to get all of the images that I wanted. As we drove home later that day, we met some heavy traffic around Nephi, which lasted until we passed Payson.

Images courtesy of the author.



Annularity, as viewed through an 8-inch scope; images taken from Kanosh, Utah, on October 14, 2023.

As the sky continued to darken, we noticed the planet Venus shining brightly above and to the west of the sun. When the moon passed inside the sun, a cheer went up from the crowd.

ECLIPSE FUN AND GAMES

At our October meeting, many CVAS members talked about the horrendous traffic they encountered, driving to and from eclipse-watching destinations. But everyone agreed that watching the eclipse was such an amazing experience that it was worth the stress. They agreed that they and other drivers seemed to handle the traffic with good humor and no road rage.

Pngtree

Several club members commented that even their young traveling companions were cheerful as they drove home after the eclipse. And when they got stuck in traffic, the kids would strike up conversations and play games like paper-rock-scissors with kids in other cars!

VIEWING THE ANDROMEDA GALAXY WITH EYES AND BINOCULARS

by Tom Westre

During late fall, especially as we move into the month of November, the evening sky gets darker early.

The stars of November are not as bright as in other seasons. But there are still interesting targets for the nighttime observer. You don't always need a telescope. A good pair of binoculars is often all you need.

One of most popular November sky targets for observers is the distant Andromeda galaxy in the constellation of Andromeda. It is the companion to the Milkey Way galaxy. While the Milky Way galaxy is 90,000 light-years in diameter, the Andromeda galaxy is 150,000 light-years in diameter and contains twice as many stars as our Milky Way.

Andromeda galaxy lies at a distance of 2.5 million light-years. When you view Andromeda, you are seeing light that has been traveling 2.5 million years to reach your eyes or binoculars. Yet Andromeda is just bright enough to see with your unaided eye. Andromeda galaxy is the farthest object the human eye can see without optical aid.

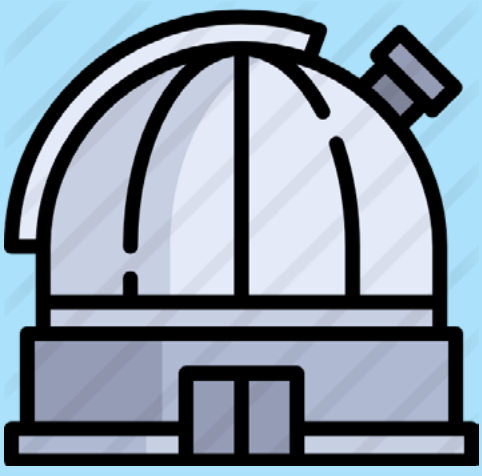
You can locate the Andromeda galaxy by using the constellation Cassiopeia as a guide. If you think of the right-hand part of the "W" as an arrowhead, it points directly toward Andromeda.

Another way to locate it is to start with the Great Square of Pegasus. Andromeda lies to the upper left of its leftmost star, Alpheratz. Scan with binoculars first, then your eye.

rawpixel

Clipart World

This article was originally a script for CVAS's UPR radio show, broadcast on Oct. 31, 2023.



ClipartMax

USU Observatory Public Night

December 1, 2023
7:00 – 9 :00 p.m.

This will be the final public night of 2023.

For details about location, weather, and parking, visit the USU Physics Department website here.

ANNULAR ECLIPSE IN CACHE VALLEY

The Weather Was Disappointing but the Snacks Were Stellar!

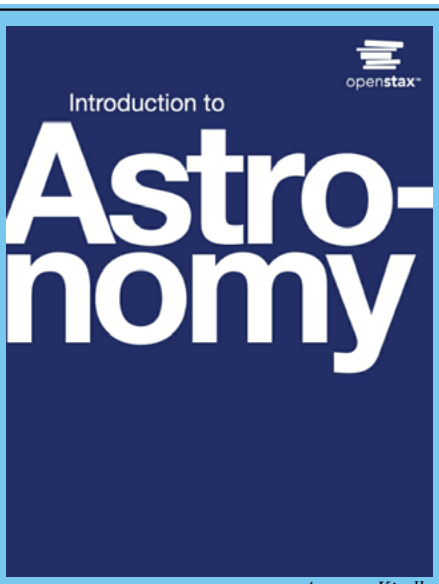
by Bonnie Schenk-Darrington

Fun fact! Our cat, Domino, did *not* like the 2017 eclipse. This time, he acted skittish again during annularity. He clearly noticed the decrease in light and temperature--even though Cache Valley was cloudy and we didn't experience full annularity here.

Classroom Clipart

Clockwise from top center: Dane watching the eclipse with his viewer; Galaxy Cheesecakes; Annular Eclipse Cupcakes; Dane enjoys a post-eclipse treat; annularity, which was disappointing. Right before annularity, though, the clouds cleared a bit and we were able to view the eclipse, surrounded by clouds, through our viewers. It looked cool but I didn't get any pictures.

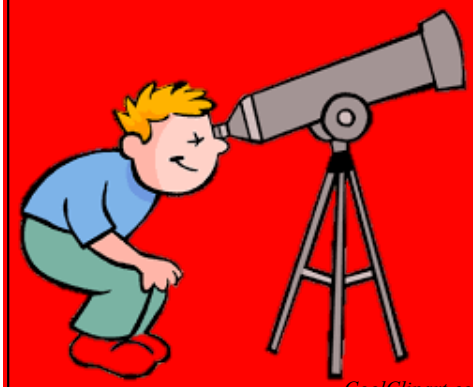
Images courtesy of the author.



Amazon Kindle

New 2nd Edition of Free Astronomy 101 Textbook Now Available!

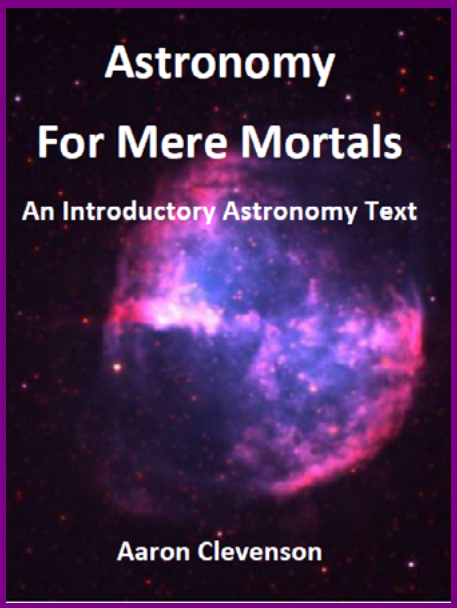
In an effort to democratize knowledge, the OpenStax project produces free digital and inexpensive hard-copy college-level textbooks written by professionals in many fields. You do not have to be a college student to request a copy. You can read more about the new astronomy textbook here. And you can download or order a copy here.



CoolClipart.com

Stumped? Befuddled?? Bamboozled??? Telescope Help Is Available!

When even your CVAS friends can't answer your obscure telescope questions, you might find it helpful to call Tom Sevcik at the Clark Planetarium in Salt Lake City! His number is (385) 468-1264. You can read his bio on the Clark Planetarium website.



Astronomical League

Astronomy for Mere Mortals

You can download the e-book, *Astronomy for Mere Mortals* by Aaron Clevenson, a complete introductory textbook, available free, updated annually. You can download a free PDF here. You may print it, or if you would like a printed copy, please contact the author, Aaron Clevenson, at aaron@clevenson.org.

Clipart Library

ASTROPHOTOGRAPHY GALLERY

Recent Images by Club Members

Jeff Clayton

Some of my best images of 2023, all taken from my backyard in Hyrum.

Left, p. 8: **Soul Nebula (IC1848)**
SHO narrowband image
Acquisition details:
Ha - 12 x 300sec
Sii - 12 x 300sec
Oiii - 12 x 300sec
Calibration frames: 20 Flats, 40 Bias, 20 Dark frames

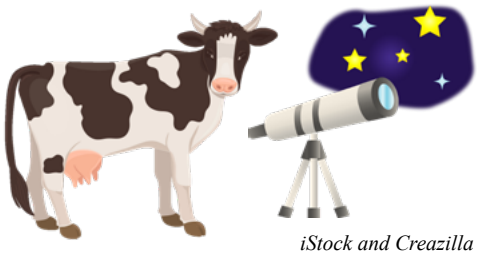
Bottom, p. 8: **Pelican Nebula (IC5070), North American Nebula and Cygnus wall region (NGC7000), 2 panel Mosaic**
SHO narrowband image
Acquisition details (each panel):
Ha - 12 x 300sec
Sii - 12 x 300sec
Oiii - 12 x 300sec
Calibration frames: 20 Flats, 40 Bias, 20 Dark frames

ASTROPHOTOGRAPHY GALLERY

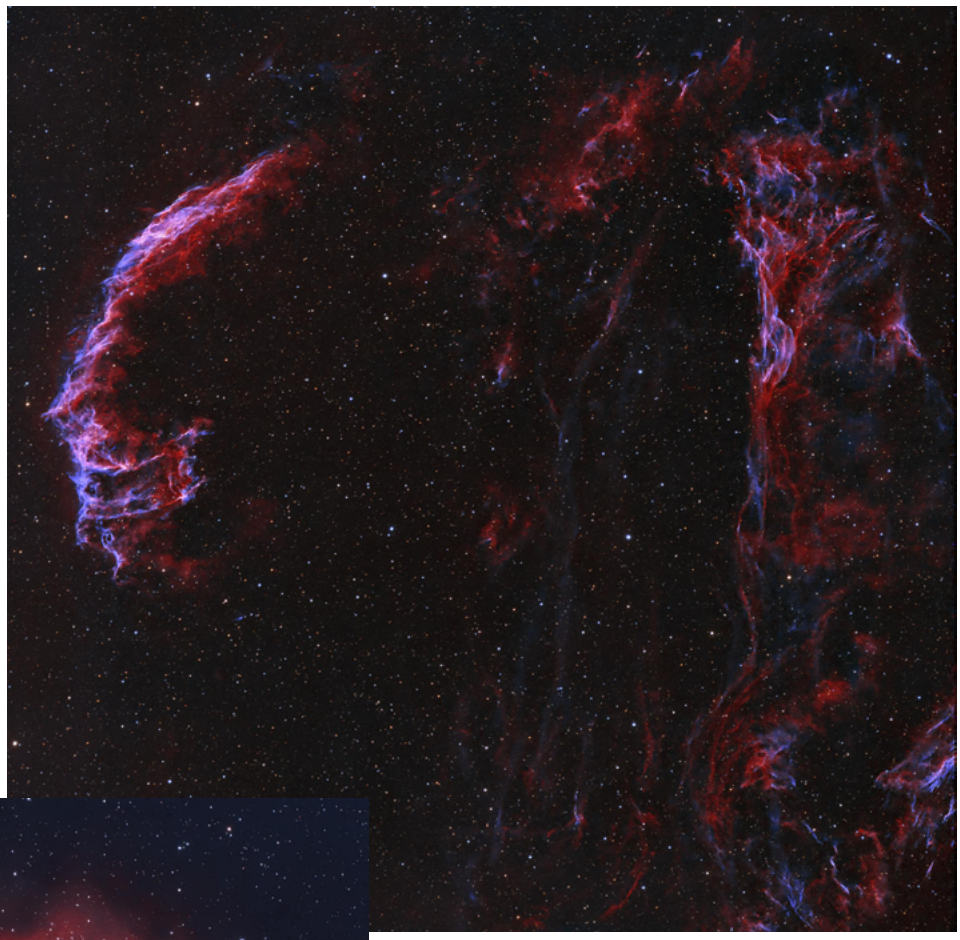
Recent Images by Club Members

Jeff Clayton

Right, p. 9: **Eastern Veil Region (NGC6992, NGC6979)**
SHO narrowband image
Acquisition details:
Ha - 12 x 300sec
Sii - 12 x 300sec
Oiii - 12 x 300sec
Calibration frames: 20 Flats, 40 Bias, 20 Dark frames



iStock and Creazilla



Bottom, p. 9: **Rosette Nebula (NGC2244)**
SHO narrowband image
Acquisition details:
Ha - 12 x 300sec
Sii - 12 x 300sec
Oiii - 12 x 300sec
Calibration frames: 20 Flats, 40 Bias, 20 Dark frames

Your Image Could Be Here Next Month!

We all learn when you share your astrophotography with the club! Send your images to bschenkdarr@gmail.com for publication!

Clipart.World and Cliparts Zone

Need a quick astronomy fix?
Tune in to CVAS's astronomy show on Utah Public Radio!

UTAH SKIES

Every Tuesday at 4:48 p.m.
91.5 KUSU-FM (west Cache Valley)
89.5 KUSR (east Cache Valley)

You can also download the UPR app or listen to the livestream here.
Check out our past radio shows here.

Free Online Course: Introduction to Amateur Astronomy

Clipart Library

Kalamazoo Astronomical Society (in Michigan) hosted a free introductory astronomy class online at the beginning of 2022.

The class is now over but CVAS has been given special permission to post links to the YouTube videos of the lectures! So, if you'd like to brush up on your introductory astronomy, here are links to the lessons!

KAS also has a gift shop full of cool stuff and offers many free online lectures, besides the introductory class. You can check out their main website at https://www.kasonline.org.

Introductory Astronomy Lessons

Part 1: Our Place Among the Infinities
Part 2: Discovering the Night Sky
Part 3: Binocular Basics
Part 4: Telescope Tutorial
Part 5: The Art of Astrophotography

A LITTLE ASTRONOMY HUMOR

Workers at Stone Henge preparing to move the stones back an hour.

One of the ancient birbs demonstrates his planet destruction ability.

cgi hulk feet
@johnbiehl · Follow

Alien: why should I not blow up this planet?

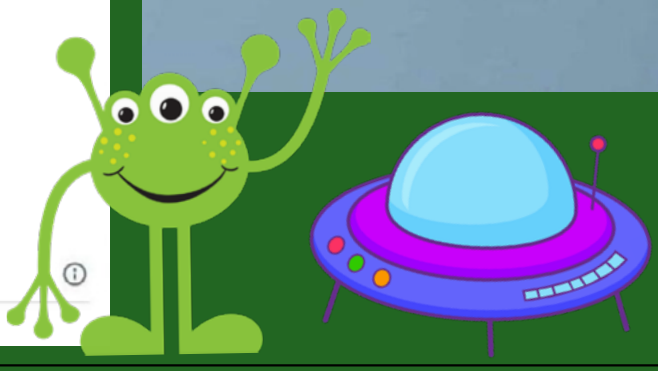
Human: we are an advanced species

A: how do you travel?

H: we light old dinosaurs on fire

11:40 PM · Jun 12, 2015

8.3K Reply Copy link



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Kalamazoo (Michigan) Astronomical Society Launches Awesome Eclipse Lecture Series over Zoom!

Check out the KAS lecture series, which will give you great tips on how to photograph and enjoy the April 8, 2024, total solar eclipse!

Download a list of lectures here. You must preregister to attend.

Kalamazoo Astronomical Society

CACHE VALLEY ASTRONOMICAL SOCIETY
MEMBERSHIP APPLICATION FORM

Member # _____

NAME:_____ _____ _____
First Middle Initial Last

Address:_____ _____ _____ _____
Street City State Zip Code

Home Phone: _____ **Cell Phone:**_____

Work Phone : _____ **Occupation** :_____

Email Address: _____

How did you learn about CVAS?

_____Website ____Star Party ____CVAS Member ____Other _____

Membership: $20 lifetime membership

Tell us about yourself: Do you have a special interest in astronomy? Do you have special skills? Are you willing to volunteer on CVAS projects or attend public outreach star parties? Astro equipment owned.

_____

_____

By signing this application, I acknowledge I have access to the CVAS website, cvas-utahskies.org , and the CVAS constitution. I agree to abide by the constitution.

Signature: _____ Date:_____

Bring this form to the meeting or contact **Bonnie Schenk-Darrington, Secretary/Treasurer** at bschenkdarr@gmail.com.