OFFICIAL PUBLICATION OF THE SALT LAKE ASTRONOMICAL SOCIETY

NOVA

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slas.us

Find us on Facebook!
https://www.facebook.com/groups/SLAS.Talk/
https://www.facebook.com/UtahStarParty
https://www.facebook.com/UtahSPOC

Nova Fun! Find the Telescope!

Inside each bi-monthly issue of the Nova is hidden a telescope graphic. Find the telescope graphic and let the Nova editor know what page and where you found the telescope on that page and if you are right, you will be mailed a fun vinyl astronomy sticker to put on a water bottle, computer, telescope, Etc! E-mail the editor of the Nova, Jenette Scott at astrobug3027@gmail.com with your find! Good Luck and Happy Hunting!!

MOON PHASES

March

(Note: Time is in 24-hour time and reflects Mountain Time Zone)

2- New Moon 10:38 (WED)
10- First Quarter 03:46 (THURS)
18- Full Moon 01:20 (FRI)
24- Third Quarter 23:39 (THURS)

April

***1**- New Moon 00:27 (FRI)
9- First Quarter 00:48 (SAT)
16- Full Moon 12:57 (SAT)
23- Third Quarter 05:58 (SAT)
***30-** New Moon 14:30 (SAT)

Did you know? - We all know that in a month that contains 2 full moons, the second full moon is known as a "Blue Moon." However, Sometimes a month will contain 2 new moons. Such as April 2022. When this occurs, the second new moon of the month is known as a "Black Moon." A black moon month is also a month that contains no new moon. This usually occurs during the month of February. ***Now you know!***

SLAS OFFICERS

Contact Us: board@slas.us

SLAS Board of Directors

President: *Aleta Cox*
Vice President: *Tony Sarra*
Secretary/Treasurer: *Rochelle Tarin*
Board Members at Large: *Jim Keane & Jeannie Gamble*

Appointed Positions

Astronomical League Contact: *Aleta Cox*
Equipment Manager: *Luke Moses*
Historian: *Patrick Wiggins*
NASA Night Sky Ambassador: *Ann House*
Nova Newsletter Editor: *Jenette Scott*
Observatory Director: *Roger Fry*
Private Star Party Coordinator: *Don Colton*
Webmaster: *Ken Warner*
ZAP Grant Writer: *Jim Keane*

SPOC Advisory Committee

Chair: *Rodger Fry*

Members: *Bob Moore, Patrick Wiggins, Luke Moses, Jim Keane, John Drabik, Aleta Cox, Leslie Fowler*
Member As Obser. Dir. Emeritus: *Bruce Grim*

SPOC Telescope Instruction Coordinators

Bogdan Refractor: *Marlene Egger* Ealing: *Jim Keane* Grim: *Rodger Fry* Clements: *Leslie Fowler*

LOOK WHO'S NEW TO SLAS!

Congratulations to our 2,500th member since our founding in 1971: *Aaron Pace!!*

New members from Jan. 1- Feb. 19

Jordan Cooke, Krista Galke, David Hamsberger, Rod Hawker, Michael McPhee, Allison Moist, Michael Moosman, Aaron Pace, Ren Parkin, Adam Rupper, Marlin Sandlin Jr., Cody Sommer, Todd Vogt, Daniel Walter, James M. Wikens, Mark Wilson.

What's Inside

Vernal (Spring) Equinox!

For Salt Lake City, Utah: Vernal Equinox will be Sunday, March 20, 2022, at 9:33 am MDT; which is 3:33 pm UTC.

VOCABULARY WORD OF THE ISSUE:

EQUINOX - ONE OF THE INTERSECTIONS OF THE ECLIPTIC AND THE CELESTIAL EQUATOR.

An Equinox occurs when the earth reaches a point in its orbit around the sun where the tilt of the earth put the sun and its rays directly over the equator and the night and the day are about equal in length. This happens twice a year, around March 21, marking spring for the Northern hemisphere and fall for the Southern hemisphere, and then again around September 23, marking fall for the Northern hemisphere and Spring for the Southern hemisphere.

Inspiration for the Astronomer mind

"We find them smaller and fainter, in constantly increasing numbers, and we know that we are reaching into space, farther and farther, until, with the faintest nebulae that can be detected with the greatest telescopes, we arrive at the frontier of the known universe.."
--Edwin Powell Hubble--

Mar 13, 2022 - Daylight Saving Time Starts

When local standard time is about to reach
Sunday, March 13, 2022, **2:00:00 am** clocks are turned **forward** 1 hour to
Sunday, March 13, 2022, **3:00:00 am** local daylight time instead.

Sunrise and sunset will be about 1 hour later on Mar 13, 2022 than the day before.

Source: (timeanddate.com)

SLAS Calendar of Events

Mar. 1: *Dewinterize SPOC* 3 PM (Weather permitting)
Mar. 4 - 5: *Messier Marathon*
Mar. 9: *SLAS Board Meeting*
Mar. 16: *General Meeting*
Apr. 1 - 2: *Messier Marathon*
Apr. 8: *Public Star Party* - Sandy Library - 10100 S. Petunia Way - Sunset to 9 pm. Please follow COVID-19 protocol and wear masks.
Apr. 9: *Public Star Party* - SPOC - Sunset to 9 pm Please follow COVID-19 protocol and wear masks.
Apr. 13: *SLAS Board Meeting*
Apr. 16: *Public Star Party* - SPOC - Sunset to 9 pm. Please follow COVID-19 protocol and wear masks.
Apr. 20: *SLAS General Meeting*
Apr. 21-22: *Lyrids Meteor Shower*
Apr. 23: *Public Star Party* -SPOC - Sunset to 9 pm. Please follow COVID-19 protocol and wear masks.

April is Awareness Month!

April 1-30: ***Global Astronomy Month!*** This is a campaign hosted by *Astronomers Without Borders*. A non-profit organization whose goal is to bring all people together under one sky and explore the stars. For more information about activities and resources available visit: **https://my.astronomerswithoutborders.org/programs/global-astronomy-month#GAM2021**

April 22-30: ***International Dark Sky Week!*** This is a campaign hosted by the *International Dark-Sky Association*. Their goal is to bring awareness to the problem of light pollution and how it is diminishing our night sky. For more information and resources visit: **https://idsw.darksky.org/**

NOTE: web addresses in this issue may need to be typed directly into your search browser. Hyperlinks are having issues.

Astronomer Spotlight

Happy Birthday To: Caroline Herschel

-Born March 16, 1750 in Hanover, Germany.
-Little sister to William Herschel. She was 12 years younger than him.
-Favorite aunt of John Herschel.
-At age 3 she contracted Small Pox which left her face terribly scarred.
-At age 11 she contracted Typhus which stunted her growth.
-Caroline's mother believed females should not be educated, they should only focus on domestic duties. Caroline's father, who was a musician, wanted to teach Caroline, but Caroline's mother staunchly refused to allow him to teach Caroline.
-Her parents felt that due to the physical effects Small Pox and Typhus left on Caroline, she would never marry, so her mother made her the family's domestic servant.
-William, who had moved to England to teach music and play in performances, did not like the situation his little sister was in. He paid his mother to employ another domestic servant and took Caroline to England to teach her music and have her perform with him. She became an accomplished soprano vocalist.
-William taught Caroline to read, write, speak English, and do mathematics.
-When William turned his interest to astronomy, Caroline joined him. She was with William when he discovered Uranus.
-King George III hired Caroline and gave her a yearly salary for her work in astronomy. She became the first professional woman astronomer in Britain.
-Caroline and William discovered 2,500 nebulae which Caroline complied in a catalog and published. She was awarded the British Royal Astronomical Society Gold Medal in 1828 for this publication. She was the first woman to receive this medal.
-Caroline made a list of all the errors she and William found in the *British Catalogue of Stars*. She published this list of errors and won the appreciation of all of Britain's astronomers of the time.
-She discovered 5 comets on her own and rediscovered Comet Encke. She also found other comets with the help of William.
-Discovered open star cluster NGC 7789 in Cassiopea. This open star cluster is called the White Rose Cluster or Caroline's Rose because of the rose petal pattern this star cluster has.
-When Caroline was 95 years old, Alexander Von Humboldt brought a large gold medal to Caroline from the king of Prussia. It was the king's way of saying thank you and recognizing Caroline and her brother William, who had passed away several years earlier, for their contributions in progressing the work of astronomy.
-Caroline died at the age of 97 and is buried by her parents in Hanover, Germany. Despite what her parents thought were physical handicaps that would hinder her life, she accomplished more than what was thought capable of her. She proved that anyone could reach for the stars and accomplish their goals. Happy 272 birthday Caroline Herschel!

THE MESSIER MARATHON!

If you are new to the hobby of astronomy, you have probably heard the term "Messier Object," or "Messier Marathon" tossed around a few times. What is this "Messier" you might ask? Charles Messier was a French astronomer born in 1730 (More will be featured on Monsieur Messier's life next Nova issue as we celebrate his birthday). He became obsessed with finding comets. He was able to discover 13 comets, but through his observations, he found many objects in the night sky that were not comets. He decided to document these objects so that he would not be constantly tripped up by them as he searched the skies. Later, this list of objects was published in 1774 and is known as the Messier Catalogue.

The Messier Catalogue features diffuse nebulae, Planetary nebulae, open star clusters, globular star clusters, and galaxies. All of which are seen from the northern hemisphere, because Messier never left France for any of his observations. Back when Messier was doing his observations, astronomy was visual only, meaning mostly what you could see with the naked eye. Telescope optics were still in their infancy, so all his observations were made using a 100-mm (4-inch) refractor telescope. Since most of the objects he observed are reasonably bright, it isn't too difficult to use a 4-inch telescope or even a pair of binoculars to see these objects. Some of the objects can even be seen with the naked eye if in an area with very dark skies and little to no light pollution.

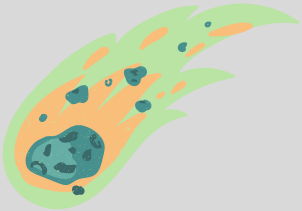
The Messier Marathon is a challenge that astronomy enthusiasts like to stretch themselves with. The best time to do the all-night Messier Marathon is in the spring in March or in April around the new moon. Marathoners start at sunset looking in the west for the objects that will set first, and then they move their way across the sky to the east staying up all night until sunrise trying to find as many of the 110 objects listed in the Messier Catalogue as they can before the sun rises. The ultimate goal is to find all 110 objects in one night if you can. This is one way to run a Messier Marathon.

Another way to run this marathon is to spread it out over the course of a year and locate the objects in the seasons they appear in the night sky. Either way, it is a fun way to learn your way around the night sky. Most enthusiasts that pull the all-nighter marathon usually do it in groups and make a party of it.

There are a lot of resources to help one plan a Messier Marathon. They outline what objects to look for first and usually provide a log where notes can be made about what objects were located and when. One source for this is on our own SLAS website. There are also Messier Marathon books and workbooks that can be ordered from astronomy supply shops and places like Amazon. If you visit the Astronomical League's website at this address: https://www.astroleague.org/al/obsclubs/messier/mess.html, they have a Messier Marathon Program where you can earn certification. Another great site is this pdf file located at file:///C:/Users/homes/OneDrive/Desktop/Messier%20Catalog.pdf (copy and paste this link into your search browser).

The best time for the Messier Marathon all-nighters this year are the weekends of March 5, and April 2, weather permitting.

If you do go out, let us know where you went and whom you went with, and share your experience! We would love to feature it in the Nova! You can send pictures and experiences to the Nova editor Jenette Scott at astrobug3027@gmail.com. Happy Marathoning and Clear Skies!!



WANT TO HEAR A METEOR?

Radio astronomy is an arm of astronomy that detects and analyzes radio waves emitted by objects in space. You can experiment with radio astronomy and listen for meteors entering the Earth's atmosphere!

With the Lyrid Meteor shower coming up in April, this is the perfect opportunity to experiment with radio astronomy and listen for a meteor.

What you will need is an FM radio with an antenna. Your car radio or a portable radio will do. Boomboxes do not seem to work very well for this.

Next, turn the radio on and place the dial on the FM frequency between two clear radio stations. You'll hear a bunch of static at this point. Extend the antenna and that is it. Now sit back and listen.

What are you listening for? You are listening for a meteor to enter the earth's atmosphere. How will you know when a meteor has entered the earth's atmosphere? There will be a change in the static you hear. When a meteor enters the earth's atmosphere, it ionizes the air around it. FM radio signals are broadcast from towers on the ground sending radio signals into the atmosphere. When a radio signal hits the ionized atmosphere, the meteor leaves behind, a ping is heard for a split second or sometimes a distant radio station will come in clear for a second and then transfer back to static. You don't have to sit on just one static station, you can hop around the different between station static frequencies and listen for what you can hear.

This doesn't just work for clear nights, it works for cloudy nights as well. You can keep your ears to the sky no matter the weather.

For further fun with radio astronomy, check out these sites:
Hobby Lark: https://hobbylark.com/misc/Meteor-Showers
Science Friday: https://www.sciencefriday.com/articles/build-your-own-radio-telescope-to-listen-to-meteors/

Eyes to the Sky

Keep your eyes dark adjusted for these events in the March and April night skies!

MARCH

2- ***Mercury and Saturn Conjunction***:
This will be a very challenging observation to make. Dark skies and a clear view of the eastern horizon will be needed. About 20 minutes before sunrise, and while using a pair of binoculars (10 x 50) scan the horizon east by south-east about 22 degrees to the lower left of venus to find Mercury and Saturn. Mercury will be the brightest of the two planets. They will be sitting roughly 5 degrees above the horizon. This is what will make the viewing challenging, but is worth the try.

6- ***Waxing Crescent Moon and Uranus Conjunction:***
This observation will require a dark sky, so make sure the sun has fully set the sky is dark. This conjunction can be observed with a pair of binoculars (10 X 50). Place the moon in the bottom portion of the field of view of the binoculars, and then look for a bluish pin-head light above the moon at the top of the binocular field of view. This will be Uranus. One way to know that this is the planet Uranus for sure is that the light reflecting off the planet will be steady. It will not be flickering or twinkling like the shimmering stars around it.

12- ***Venus and Mars Conjunction:***
Venus and Mars will be meeting up in the pre-dawn sky. March 12, they will be approx. 4 degrees apart. By March 16, they will be the closest at roughly 3.9 degrees apart. At this point, they will start their journey away from each other and by March 20, will be more than 4 degrees apart.

20- ***Venus At Greatest Western Elongation and in Conjunction With Mars and Saturn:***
Venus will reach its greatest distance from the sun this morning at about 45 degrees to the sun's west. Venus will rise 2 hours before the sun in the eastern sky and will be joined by Mars on its lower right and Saturn on its lower left.

APRIL

4 - ***Mars and Saturn Conjunction*:**
Look to the east about a half-hour before sunrise. Mars and Saturn will be half a degree apart in the sky. They will be evenly matched in brightness. This is a good binocular target or even a good target for a low-powered telescope.

18- ***Venus, Mars, Jupiter, and Saturn Train on the Ecliptic:***
About 30 minutes before sunrise, look to the east for the Venus, Mars, Jupiter, and Saturn line up. Jupiter will be the lowest in the sky closest to the horizon. Moving west along the ecliptic from Jupiter will be Venus, Mars, and Saturn. This lineup will be easily seen with the naked eye. Jupiter will look pale gold in color, Venus will be a brilliant white, Mars will be copper, and Saturn will appear pale yellow in color.

21/22- ***Lyrid Meteor Shower:***
This meteor shower produces approx. 15 to 20 meteors per hour and occasionally will produce a fireball. This meteor shower appears to originate from Lyra. The source of this meteor shower is the debris field of comet C/1861 G1 Thatcher Comet, discovered in 1861 by A.E. Thatcher. The comet was last visible the year it was discovered, 1861, and won't be seen again until the year 2283. The best time to view this meteor shower is between midnight and 3 a.m.

27- ***Crescent Moon, Venus, Mars, Jupiter, and Saturn Conjunction:***
Just before the sun rises, the crescent moon, Venus, Mars, Jupiter, and Saturn will be in conjunction in the eastern sky. This can be a naked eye observation or a binocular observation. Venus and Jupiter will draw closer to each other in the sky and will be their closest on April 30.

28- ***Mercury at Greatest Eastern Elongation:***
This event will be visible in the evening sky. Mercury will be its farthest to the east of the sun. Look to the Western horizon about 15 minutes after sunset. Use binoculars (10 X 50). This will be a difficult find because there will be no bright stars in the vicinity to be a guide. The best guide will be the star Aldebaran, the red star in Taurus which is also Taurus's brightest star. Aldebaran will be located 14 degrees to the upper left of Mercury. Mercury will be 16 degrees above the western horizon. A challenge to be sure, but worth the effort.

Binocular Pinpoint

Da Vinci GLOW

Over 500 years ago, long before missions were ever sent to the moon, Leonardo Da Vinci explained what we call earthshine and it is known as Da Vinci Glow.

There are times during the crescent moon phase in the waxing or waning cycles of the moon when a ghostly glow of the shadowed side of the moon is seen. After sunset or before sunrise in deep twilight is the best observation window.

This was a mystery and wondered about for millennia. Leonardo Da Vinci had the fantastic imagination to come up with an explanation that was very close to correct. In his *Codex Leicester*, written about 1510, a page with the title, "Of the Moon: No Solid Body is Lighter than Air," Leonardo writes that he believes the moon has an atmosphere and oceans of water much like the earth. He realized that the moon was a reflector of light and not a producer of light. Leonardo thought that the reason why the moon was such a great reflector of light was because of the oceans of water the moon had on its surface. Using this thought process, Leonardo deduced that the same must be true of the earth. The earth must reflect light too. The ghostly glow he explained came from the reflection of light from the earth's oceans shining on the moon. How close he was!! It isn't the earth's oceans reflecting light onto the moon, but the earth's clouds. And of course, we know that moon hasn't any oceans, but what careful observations and reasoning that brought a nearly accurate explanation!

The months of April and May are a great time to observe Da Vinci Glow and view the moon with binoculars. There are features and textures that pop out and create dimensions that can't be seen during the full moon. Get your binoculars and take a peek!

Da Vinci Glow dates this spring are:
April 4/5
April 26/27
May 3/4

Sketch Leonardo Da Vinci made of Da Vinci Glow or Earthshine in his *Codex Leicester*.

GALLERY

We need your creative side to go here!! Do you write poetry about the night sky? Do you draw astronomy comics? Have an astronomical experience you want to share? Do you sculpt, carve, paint, draw, or doodle the night sky? Do you photograph the night sky with sophisticated equipment or just your cell phone? Are you between the ages of 0 and 1000? Then WE NEED YOU and your creations!! We want them all! If you would like your creative work featured in the Nova, please send the editor of the Nova, your work! Send submissions to Jenette Scott at astrobug3027@gmail.com We look forward to all the fun talent!

SLAS Meeting Notes

NOVA

SALT LAKE ASTRONOMICAL SOCIETY BOARD MEETING NOTES
January 12, 2022

Board Members in Attendance:
Aleta Cox, Tony Sarra, Rochelle Tarin, Jeannie Gamble, Jim Keane
Other Members in Attendance:
Luke Moses, Patrick Wiggins, Bob Gamble, Leslie Fowler. Joan Carman, John Drabik and Ken Warner, Daland Speirs, Rodger Fry via Zoom
Location: Denny's 500 South 300 West, Salt Lake City, Utah, and via Zoom
President Aleta Cox called the meeting to order: 7:30 PM

Aleta provided an Agenda, Budget Sheet and Star Party schedule to Board Members at the start of the meeting.
Aleta welcomes the new board members.
Aleta asked Rodger to speak first. Rodger has a few speakers lined up. The guest speaker for January 19 is Josh Walawender, who will talk about the Keck observatory. The guest speaker for February 16 is Thomas Prettyman, who is a senior scientist at the Planetary Science Institute. On March 16, the guest speaker is Jack Danos with USU satellite design and launching obstacles. This talk is about a group of undergraduate students at Utah State University that helped design and built a satellite launched by NASA. April is open for a guest speaker. On May 18, the guest speaker is JR Dennison and USU, who will take about their involvement with design and testing of the JWST. Jeannie let Rodger know that her son can help find speakers. Rodger told Jeannie to give her a call to discuss it further. Patrick then asked Rodger when will a SPOC committee meeting be held. Rodger said maybe in February, but the big push on this is the design and moving ahead with the Jachmann memorial telescope. Jeannie mentioned she is working with contractors on getting SPOC's Refractor House Dome sand blasted and repainted.

Aleta then went over the agenda. Aleta called a vote to keep the SPOC dues and fees the same. The board members voted in favor. Aleta then moved on to the board and general meeting schedule. Board meetings are moved to 7:30pm on the second Wednesday of the month. General meetings will remain the same. SLCC scheduled general meetings through June. Parking at SLCC remains the same. SLCC asks that all members wear a mask while in the building. Aleta will put this on the SLAS website, so members are aware. Aleta then asked the board members to vote in favor of the board and general meeting schedule. The board votes in favor. Patrick asked Aleta if Golden Corral is scheduled, Aleta confirms it's booked for this year.
Next, Aleta moved on to the star and sun party schedule. Rodger spotted a mistake in the schedule for August 16th. Aleta changed August 16th on the schedule to August 13th for a solar party. Rodger asked Patrick when will Stansbury Days take place. Patrick checked and found this year Stansbury Days will he held on August 20th. Aleta asked board members for approval of the star/solar party schedule, the board approved. Joan mentioned she would like flyers with a map to SPOC for the county library. Rodger suggested printing a QR code that takes you directly to the map.
Aleta mentioned she is writing thank you cards to Roen Hale donors. Roen was a member of SLAS and a huge contributor to the SPOC building. With his recent passing, it's been suggested to make donations to SLAS in his name, in lieu of flowers. Roen was a great supporter of the club and will be greatly missed.
Rodger asked how much the donations total so far. John mentioned the total is $775. Rodger asked where the money for donations is going. John mentioned the decision the board made last year was to categorize it as donations, it has not been specified yet.
Aleta moved on to the budget sheet. SLAS paid $356 for insurance last year. This year it's budgeted at $357. Jeannie asked if insurance covers the new telescope. Luke mentioned the insurance is only liability, it does not cover property. Aleta suggested leaving insurance as is on the budget sheet. Last year SLAS paid $747 for directors coverage insurance. The budget for this year is set for $755, but upon discussion, the board agreed to increase it to $800. The guest speaker budget is $500, which has remained untouched due to Zoom. For Astronomical League (AL), SLAS paid $692.50 last year and is budgeted at $500 for this year. Upon further discussion the board agreed to change AL to $693. Aleta then proposed leaving the budget as is for office supplies, copying, entertainment, event materials, advertising, and club corporate fees. Aleta asked Ken if he was able to get 2 years of the http certificate discounted. Ken said GoDaddy only does 2 years for the initial certificate and after that it's every year. Aleta asked Ken if the http certificate budget should remain the same. Ken said he thinks it should but isn't sure. Aleta then asked Ken if he was paid the $240 website fee ($20 a month). Ken wasn't sure. John checked for Ken and in 2020 Ken was paid $99 for SLAS website registration and $79 separately for SSL certificate. In 2021, Ken was paid $99 for website registration. Ken has not requested $240 for the last two years. John suggested Ken to submit an invoice to get paid and have a paper trail. Aleta then asked if the board agrees to give Luke $500 for eyepieces for the club's loaner scopes. The board approved.
At 8:30pm, Aleta experienced Zoom connection issues and was not able to reconnect with members via Zoom.
Aleta mentioned SLAS paid $160.76 for Zoom. Jeannie mentioned she can investigate getting Zoom for free for a nonprofit. Aleta is making a budget line for Zoom for $170 and dome painting for $3,000. Patrick suggested adding a link to the budget sheet in the next issue of News so members can discuss it and vote on it at the next week's general membership meeting. Luke said he will update the budget sheet and send it to Aleta and Patrick to send out to members.
Aleta called the board for approval on the budget with the pending changes. The board approved.
Ken put Jim on the website as the SPOC Star Party Coordinator and Jeannie as School & Special Star Parties/Public Outreach Director. Jeannie would like to stay as public and school outreach. Jim is okay being the SPOC coordinator. Jeannie was contacted by Tom Peterson from Wendover Museum. They want to do a dark night event in April and would like SLAS to be involved. They are getting world war veterans to talk about celestial navigation. Tom Peterson told Jeannie we are welcome to take a tour of the museum first before agreeing. Jeannie said she is going on Monday to check the location and decide if it's a good place to set up scopes. Jeannie said we can decide on what day to hold the event. Jeannie mentioned she is interested in holding school contests to keep them engaged. The school who wins the contest, gets a special star party. Jeannie mentioned she is working on grants for schools, library loaner scope program (Jeannie is coordinating with Joan), general operations, and a potential education center. Jeannie is interested in applying to 21 grants. Jeannie said the grants either need only her signature with permission or go through Aleta. Aleta thinks we need to talk about each grant individually to see if its needed. These grants are coming from a variety of places, NASA, space force, etc. Tony is concerned about the club obligations if grants are approved. Jeannie said she will present an example to the board for approval. Jeannie mentioned Bryce Canyon is doing the astronomy festival on June 22-25. Tony mentioned he is meeting with Paul at the University of Utah to see if SLAS could continue doing remote imaging.
Rochelle mentioned she won't be able to take general meeting minutes. Patrick accepted to take general meeting minutes.
There being no further business, Aleta adjourned the meeting.
Meeting adjourned: 9:07 PM

SLAS Meeting Notes Continued

General Meeting Notes
01/19/2022

SLAS President Aleta Cox called the meeting to order at 7:30.

Aleta thanked the college's doctors Barnes and Jones for arranging for SLAS to continue to meet on campus.

She then introduced the evening's guest speaker, Dr. Josh Walawender, Staff Astronomer at the W. M. Keck Observatory in Hawaii. Dr. Walawender spoke about the maintenance, instruments, and use of the observatory's twin 10-meter telescopes.

Motions were made, seconded, and approved regarding 2022 SLAS dues, SPOC fees, board and general meetings, star and Sun parties, and budget.

Dues will remain at $20 per year, SPOC fees will remain at $25 per year.

Board meetings will continue to be held at Denny's restaurant on 500 S in Salt Lake on the 2nd Wednesday of each month with the start time moved from 7:00 to 7:30.

General membership meetings will continue to be held on the Salt Lake Community College's Redwood Road campus on the 3rd Wednesday of each month, excluding December, starting at 7:30.

Information on the approved SLAS public star and Sun party schedule can be found on the SLAS website.

A copy of the budget can be found in the January/February 2022 issue of Nova on the SLAS website.

Aleta announced the recent death of long-time SPOC supporter Roen Hale. She said Roen's widow had asked that in lieu of flowers, donations be made to SLAS and that so far over $700 dollars in donations have been received. Aleta added that Thank You cards had been sent to the donors.

Birthday wishes were expressed to long-time SLAS member Charlie Green who was celebrating his birthday that day (though not present at the meeting).

Aleta adjourned the meeting at 8:58 and a few members proceeded to the nearby Dee's restaurant for "Advanced Training".

SLAS Meeting Notes Continued

NOVA

SALT LAKE ASTRONOMICAL SOCIETY BOARD MEETING MINUTES February 09, 2022

Board Members in Attendance: Aleta Cox, Tony Sarra, Rochelle Tarin, Jeannie Gamble, Jim Keane Other Members in Attendance: Luke Moses, Patrick Wiggins, Bob Gamble, Leslie Fowler, Joan Carman, and Ken Warner. Rodger Fry via Zoom Location: Denny's 500 South 300 West, Salt Lake City, Utah, and via Zoom

President Aleta Cox called the meeting to order: 7:30 PM Aleta provided an Agenda to Board Members at the start of the meeting. Aleta asked Rodger to speak first. Rodger has a few speakers lined up. The guest speaker for February 16th is Thomas Prettyman, who is a senior scientist at the Planetary Science Institute. March 16th is open for a guest speaker. On April 20th, the guest speaker is Christopher Gamble, who is working on the SLS rocket as an SLS Booster Quality Assurance Supervisor. On May 18th, the guest speaker is JR Dennison and USU, who will talk about their involvement with the design and testing of the JWST. On June 15th, the guest speaker is Anil Seth from the University of Utah who will talk about their discovery of Black Hole B023-G078 in the Andromeda galaxy globular cluster. Aleta then asked Rodger when SPOC will open for training. Rodger mentioned SPOC will open Tuesday, March 1st at 3 pm to de-winterize (weather permitting). Aleta said we have the month of March to train operators.

The first-star party will be on April 9th. Rodger mentioned the SPOC committee meeting will occur on February 26th at Denny's. He will let committee members know what time. Patrick asked Rodger who bought the Sirius Observatory's 2.3-meter home model observatory dome since paperwork came in for it. Luke said Bob had arranged it. Patrick said he will follow up with Bob.

Aleta moved on to the next item on the agenda. Aleta said she would like to schedule one school star party per month. Aleta said she would like a school representative to be on-site and for them to check if grass sprinklers are off, also parking lot lights if applicable. Restrooms should be available for operators and children need to be accompanied by a parent. When doing school star parties, covid protocols must be followed: wear a mask, have hand sanitizer, and clean scope lens after each use.

Aleta then asked Jeannie to give an update on the grants. Jeannie said she put a hold on applying to grants based on last month's board meeting feedback. However, Jeannie mentioned she will apply for grants at the board's request. Jeannie mentioned she's helped the Wendover Museum apply to grants and they are putting an observatory. Jim mentioned he has no problem with applying to grants but suggested that the board needs to seek what activities need to be funded first before applying. Joan suggested applying for a grant to get telescopes for Davis County libraries. Joan would like the board to decide soon so Jeannie can move forward with the application process. Jim asked Joan what the pros and cons are for providing those telescopes. Joan said the telescopes are specifically for Davis County libraries because they don't have any yet. Joan mentioned there are 66 telescopes in Salt Lake County and 34 telescopes in Salt Lake City and they don't need any more at the moment. Joan mentioned there is minimal to no cost for SLAS and any grants will cover the entire telescope and parts. Jim asked Joan how many telescopes are needed and the cost. Joan mentioned there are 7 libraries in Davis County and she's hoping to have 2 telescopes per library, therefore a total of 14. Joan mentioned prices for telescopes have increased because of the pandemic and grants will help pay for them. Aleta then asked Joan if the libraries have reimbursed SLAS in the past for expenses. Joan said sometimes the county pays for the telescopes or it's covered by a grant. None of the cost has come from SLAS. Jim asked if the board agrees to apply for grants for the library loaner program. The board agreed. Jeannie said she will move forward with applying to grants for the library loaner program worth $10K ($300-$325 a telescope and $50 for maintenance). Patrick asked if there is any thought in putting telescopes in the Tooele library. Jeannie said they probably don't know about the opportunity. Patrick said next time he does a program there; he will ask them. Jeannie mentioned she would like to look at getting telescopes for schools to get them interested in astronomy. Patrick said he is worried schools won't use them. Aleta then asked if the board has a problem with Jeannie looking into telescopes for schools. The board doesn't have a problem.

Aleta mentioned there were only 8 people at last month's general meeting. Aleta asked the board if general meetings should move fully on zoom or keep in-person meetings. The board thinks it's best to keep the general meetings in person and zoom. The board will revisit this if there continues to be a decline in in-person attendees. Aleta asked Tony if he would send an SLAS blast email for a general meeting reminder. Tony agreed.

Aleta then asked Tony if he has anything to report. Tony said he doesn't have anything to report but asked Rodger if the Jachmann telescope is fully funded or if SLAS needs to apply for grants. Rodger said the Jachmann telescope is fully funded. Luke said the board has allotted $7K for funding. Tony asked if we could consider applying for additional funding for a building. Rodger said he is hesitant to put up another building. Tony said the board should consider it. Rodger told Tony he should attend the SPOC committee meeting. Aleta then asked Rochelle if she has anything to report. Rochelle mentioned there is $54,308 in the bank and 6 new members signed up last month. Rochelle is still looking into GNU Cash as she is still not convinced if it's the right program to switch over to for the bookkeeping. Rochelle will reach out to John Drabik for questions on the program.

Aleta then asked Jeannie if she has anything else to add. Jeannie mentioned she got a hold of zoom and SLAS could get a 30-50% discount depending on what package is purchased. Jeannie also mentioned Rose Wood Painting agreed to do the outside of the dome. Jeannie asked the board if she could do a press release for SLAS's 2,500 members, without mentioning the member's name. The board agreed. Tony asked for a media contact list. Aleta said she will send it to him.

Jeannie mentioned she sent Joan an email about Slastrofest. Joan said Slastrofest is designed strictly for new members. Jeannie said she would like to take over planning for Slastrofest and suggested an all-day event for new members and intermediate members. Joan doesn't think intermediate is necessary. Joan mentioned the last Slastrofest took place in 2018. Joan told Jeannie to go down the roster and send Slastrofest emails to members 2 years or less. Joan mentioned Whitmore Library auditorium would be big enough to hold the festival. Jeannie mentioned she would like to have multiple sessions at once. Tony said he doesn't know if we have enough audience to split sessions. Jeannie said she would hold each session twice. Joan and Jeannie agreed to work on Slastrofest together.

Jeannie said she went to Wendover Museum. Wendover Museum will hold its event on April 30th. It will be a day and night event. They will do tours of the museum during the day and at night hold a star party. Operators will be able to pull up their cars to the tarmac and set up right there. There will be drinks, snacks, and restrooms available. Jeannie asked if the board is okay with her making fliers for the event. The board agreed. Jeannie asked for a new member package. Rochelle will send it to Jeannie.

Aleta mentioned the Astronomical League conference will be in person on July 28-30 in Albuquerque, NM. Joan mentioned Astronomical League has been trying to get involved in the library loaner program. SLAS library loaner program is the 3rd largest. Aleta mentioned Bryce Canyon is doing the astronomy festival on June 22-25 and they would like to know how many members are interested in participating.

Aleta asked if there are any announcements for the general meeting. Tony mentioned the Advance Imaging Conference is May 20-21 at the San Jose Convention Center. They hold it once every 2 years and they have guest speakers. Jeannie said she will mention it in the press release for the next big event outside of SLAS.

There being no further business, Aleta adjourned the meeting. Meeting adjourned: 8:20 PM.