THE EVENT HORIZON

ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

VOLUME 34, Issue 2
February, 2024

In the Moon's Shadow – Chasing Eclipses

by

Dr. Angela Speck
University of Texas, San Antonio

Dr. Angela Speck of the University of Texas, San Antonio (UTSA), will be featured at the February meeting of the Saint Louis Astronomical Society. (SLAS) The meeting will be in person at Washington University and Dr. Speck will speak via Zoom.

On Monday, April 8, 2024, a total eclipse of the sun will be visible along a path 100 to 124 miles wide, stretching from the mid-Pacific Ocean to Newfoundland and into the northern Atlantic Ocean. The entire continental United States will see at least a partial solar eclipse. Locally the total eclipse path runs through southeast Missouri, near Poplar Bluff, Perryville, and Cape Girardeau, and across Illinois through Carbondale, Mt. Vernon, and Fairfield. The sun will be about 97% eclipsed as viewed from the Saint Louis area. Dr. Speck will explain where, when, and why a solar eclipse occurs. She will also talk about safe ways to observe the partial phase of a solar eclipse. Except during the total phase, it is dangerous to observe the sun directly without special equipment made for this purpose. SLAS will provide 5 pairs of eclipse glasses to each adult who attends this meeting in person.

Dr. Angela Speck is Professor and Department Chair in the Department of Physics & Astronomy since her arrival at UTSA in Fall 2019. Prior to joining UTSA, she was at the University of Missouri (MU) for 17 years. Her research interests include stardust, infrared astronomy, and stellar evolution, as well as science education and public outreach. She has been a member of several American Astronomical Society (AAS) committees and has co-chaired the AAS Solar Eclipse taskforce since its inception in 2014. She became a Fellow of the American Association for the Advancement of Science (AAAS) in 2022

Upcoming meetings:
March: Tom Rathjen, The Moon & Beyond, NASA
April: Gautham Narayan, PhD "4 Meter Telescope in Chile"; Univ of Illinois
May: Fran Bagenal, PhD., Exploration of Jupiter System: Past, Present and Future; University of Colorado at Boulder
June: Steven R Gullberg, PhD., Archioastromy; University of Oklahoma
July 2024: Ashley Davies, PhD. "Juno Close Flybys of Io"; JPL
August: Bradley Tsalyuk, Exhibit Developer, Samuel Oschin Air and Space Center, Ca Science Center

Inside This Issue

President's Corner Memberships Night Sky Network Awards	2
Homemade Fest StarB Quiz	3
History of Space and Astronomy Thru Stamps	4
Meteorite or Meteor Wrong	5
Gallery	6
Board Minutes	7
Financials	9
Events	10
Contacts	11

February 16th Meeting will be In Person and Online!

The meeting will begin at 7:30 PM Friday, February 16 in McDonnell Hall, Room 162, on the Danforth campus of Washington University, Saint Louis, MO 63105. McDonnell Hall is accessible from Forsyth Boulevard via Tolman Way. Free yellow zone and garage parking spaces are available. The event will also be available via Zoom online conference per the link here: **To join with computer or smartphone: use the below link.** **https://zoom.us/j/8604505790?omn=91696112100** **meeting ID: 860 450 5790**

NSN Outreach Pins to be given out at Febuary meeting Friday! See page 2 to see if you're on the list! Please come to pick up your pin!

Homemade Fest Set! Saturday, Febuary 24
Kirkwood Community Center
See page 3 for details

President's Corner
by Jim Small

Are you ready for the eclipse?? I sure hope so!! If you have anything you would like to tell us about equipment, or techniques, we would sure like to hear about it at Homemade Fest on Saturday, February 24th. We moved the date to the Saturday the weekend AFTER meeting weekend because we now do JCO events the Saturday after the meeting. It would be great to read a review of anything new you might have via an article for the newsletter, too!

This month Angela Speck will join us in advance of the April 8 Total Solar Eclipse. We haven't had her speak to us in a while and I'm really looking forward to it!! This meeting will be both in person and via Zoom. Dr. Speck will be on via Zoom.

Speaking of the eclipse, what are your plans? If you have cool plans or interesting equipment you will use to view it, Homemade Fest would be a great place to do a presentation about that, too. An article for the newsletter would be great.

Outreach has kicked in for the spring with a plethora of events scheduled already. Be sure to check the calendar to see where you can help us out with some of the programs.

Speaking of outreach, we will be recognizing those members who participated in outreach at the in-person meeting this month. If you're on the list in the article below, please make an attempt at attending the meeting this month. By the way, the pin this year is spectacular! Hope to see you there!

I am currently in a meeting for MSRAL (June 7-9) and they are ready to go on their registration. You can just check the website at www.msral.org for the registration page. We might also have the the convention chair with us at the meeting tomorrow night. He will talk about the meeting for a brief time. Early bird registration will save you $10. The price will likely go up somewhere in May. Registration is $55, Lunch and StarBQ are $20 and the banquet is $40. You can't stay at the lodge in the state park where it will be held, but there are a number of hotels listed close by.

ALCON is also close by this summer and will be hosted by the Kansas City group. July 17-20. We don't have any info about pricing or registration yet. They have a few speakers listed.

It's going to be an exciting couple of months till the eclipse, so make sure you all of your equipment in order and do a test run or two!
Clear Skies, Jim Small

SLAS Memberships Expiring in February

Mark	Biernack
Jeff	Carpenter
Craig	Cottrell
Andrew	Gondzur
Timothy	Hulla
James	Idoux
Richard M.	Jenning
Dennis	Latinette
Mike	Mortimer
Chelliah	Navin
John	Sullivan
David	Trumbo

SLAS Memberships Expiring in March

Nick	Bodi
William & Rita	Breeden
Gene J.	Dultz, Jr.
Richard	Fefferman
Robert	Goddard
Chris	Hanson
Lisa M.	Holderle
Jeff	Kisslinger-
Rosanne	LeBaige
Michael & Lynnea	Malolepszy
Rick A.	Menendez
Fred	Raines
Rhonda S.	Whelan-
Benjamin	Winningham
William	Winningham
Barry	Young

Night Sky Network Outreach Awards to be Given Out at Friday's Meeting

by

Mark Jones

At the Feb 2024 meeting Friday, SLAS will be recognizing the members who volunteered for Public Outreach in 2023. We had 40 members volunteer for events in 2023!!

NSN guidelines allow awarding of volunteer pins for members who volunteered for 5 or more events in 2023. If you have trouble updating or checking your numbers, please contact me. https://nightsky.jpl.nasa.gov/news-display.cfm?News_ID=1015

Thank you to all who volunteered in 2023, please update your numbers by Jan 20, 2024 Here is a quick talley based on current NSN records

John Strebeck 91 events; 259.5 hours
Kathleen Strebeck 85 events; 240.5 hours
Donald Ficken 39 events; 115.5 hours
Carl McCullough 26 events; 80 hours
Mark Jones 26 events; 78.5 hours
Cook Feldman 22 events; 77.5 hours
Richard Fefferman 17 events; 39 hours
Bill Biermann 16 events; 42.9 hours
Stephen Kelly 15 events; 39.5 hours
Dennis Latinett 15 events; 37.8 hours
Randy Harrison 12 events; 45 hours
Bill Breeden 12 events; 42 hours
Richard Jennings 12 events; 23.8 hours
Ronald Sides 11 events; 28 hours
Rick Menendez 9 events; 18 hours
James Small 8 events; 23 hours
Larry Campbell 6 events; 17 hours
Maryanne Anglongto 6 events; 15.5 hrs
Bradley Waller 6 events; 15 hours
Chris Hanson 5 events; 16.5 hours
Frank Mack 5 events; 11 hours
Phyllis Nolan 4 events; 12 hours
Mary Barteau 4 events; 10.5 hours
Kenneth Levy 4 events; 10 hours
James Malke 4 events; 8.5 hours
Alfred Schovanez 3 events; 11 hours
Frederick Fischer 3 events; 10 hours
Larry Meyer 3 events; 6.5 hours
Joseph Barteau 3 events; 6.5 hours
John Duchek 3 events; 6 hours
Timothy Hulla 2 events; 9 hours
James Idoux 2 events; 7.5 hours
Rosanne LeBaige 1 events; 6 hours
Laureen Caliman 1 events; 3 hours
Kunal Kotkar 1 events; 3 hours
Tom Keutzer 1 events; 2 hours
Allan Stewart 1 events; 2 hours
Benjamin Winningham 1 events; 2 hours
David Adkins 1 events; 2 hours
Jeff Kisslinger 1 events; 2 hours

Homemade Fest 2024

Saturday Evening, February 24, 2024

Kirkwood Community Center

Greetings SLAS Collective! Now that the Holidays are basically over, chase away those winter blues and join fellow SLAS members and guests for our annual pot-luck dinner. It is time for you to inform the SLAS Collective what you received for Christmas, built, refurbished, improved, imaged, explanation of a concept, or something you just can't do without. It will also give you another chance to present your plans for the TSE for 2024. If you have a presentation to make, please send in your requests to the Borg Collective. Just let us know your topic and how much time you will need. Also, please let us know what food item you are bringing. Send requests for Presentations and Food Items to Bradley Waller at vicepresident@slasonline.org

Attendance prizes will be drawn throughout the evening

Time: 4:30pm to 10:00pm

Location: Kirkwood Community Center, Room 300

111 South Geyer Road, Kirkwood, MO 63122

This event is free to all SLAS members and their families. Guests are $5 each. RSVP on SLAS Night Sky Network is optional but encouraged.

From the StarBQ Quiz

Impossible events? Circle best answer

3.1 Venus was in conjunction with the Pleiades April 12, 2023. Is it possible for Venus and Pleiades to be in conjunction during the month of January in the next 50 years? Hint: Pleiades has an elongation more than 150 degrees Yes No

3-2. Venus transited the sun in 2004& 2012? Will it be possible to see another Venus transit in the next 50 years? Yes No

3-3. The JWST observes the universe from the L2 lagragian point more the 1 million kilometers from the earth. Is is possible for the JWST to observe Venus? Yes No

3-4. Is it possible for JWST to observe Jupiter? Yes No

3-5. Is it possible for JWST to observe the center of the Milky Way in December? Yes No

++

Answer #3-1: No Greatest elongation for Venus is between 45° and 47°. At end of January the

Answer #3-2: No next transits of Venus will take place on 10–11 December 2117 and 8 December 2125.

Answer #3-3: No, ecause the telescope and instruments have to be kept cold, Webb's protective sunshield is blocking the inner solar system from view. This means that the Sun, Earth, Moon, Mercury, and Venus, and of course sun-grazing comets and many known near-Earth objects cannot be observed.

Answer #3-4: Yes the first images of Jupiter were taken July 27, 2022

Answer #3-5: No at that time the center of the Milky Way (Sagittarius) is too close to the Sun.

The History of Space and Astronomy thru Stamps

by

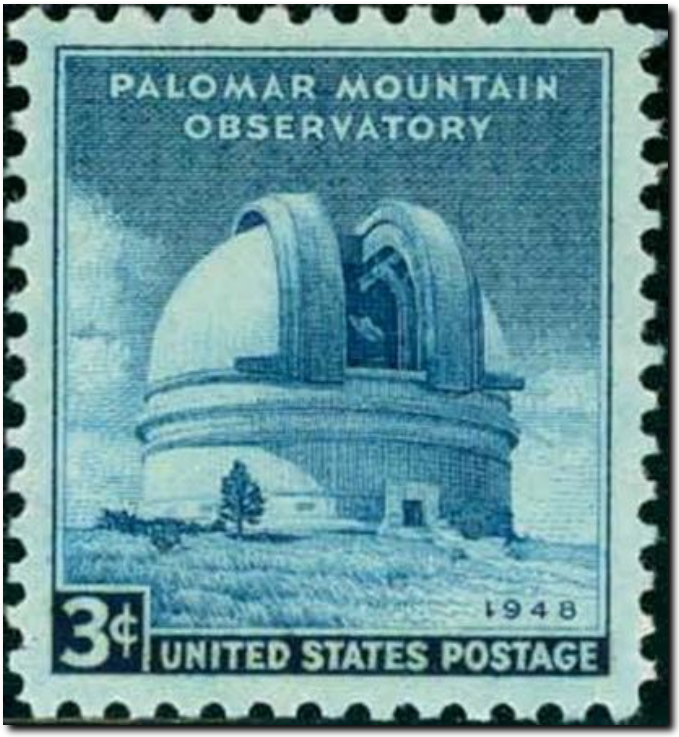
Bill Bliermann

Consider these two approaches: 1) This fuzzy white blob is hard to see but it is a galaxy. OK. 2) The image in the eyepiece started traveling to us over 2 million years ago, before mankind was on the earth, and is an entire Island Universe like our Milky Way ! It is called M31. We experience these two approaches when we practice our Astronomy Hobby.

The same concept can be applied to Stamps. They are little pieces of paper that can be perceived as boring. Or they can tell an entire story, of a past era, and the exciting achievements along the way.

I prefer the latter approach in both cases, and I have accumulated a collection of stamps. I recall riding my bike to the local post office in South St. Louis, starting at age 10, to spend grass cutting money on commemorative stamps. I still have those pieces of paper, and articles that I've written over time. I'll share those with the club.

PRE-SPACE ERA



The 200-inch (5.1-meter) Hale Telescope

Dedicated in 1948 and the largest effective telescope in the world until 1993, the 200-inch Hale Telescope is a workhorse of modern astronomy and contributes to a wide range of astronomical research including Solar System studies, the search for extrasolar planets, stellar population and evolution analysis, and the characterization of remote galaxies. This extraordinary instrument was the vision of astronomer and Caltech founder George Ellery Hale—the man behind the largest telescopes in the world at the beginning of the 20th century. Hale vigorously pursued funding to build the 200-inch Telescope and eventually secured the sponsorship of the Rockefeller Foundation in 1928. All aspects of building such a large and precise instrument required innovative methods and revolutionary technology, which has led some to consider it the "moon shot" of the 1930s and 40s.

A 1948 Rocket? Fort Bliss

This stamp was issued to honor the 100th anniversary of Fort Bliss in El Paso, Texas. It is probably the best US commemorative stamp for a challenging "stamp. trivia" game. "Which United States stamp features a camel on it?" "Which stamp was the first stamp to picture a rocket?"

Fort Bliss is a United States Army post in New Mexico and Texas, with its headquarters in El Paso, Texas. It is the second-largest installation in the Army overall (the largest being the adjacent White Sands Missile Range) and is used for missile and artillery training and testing.

Project Echo 1960

This was the first passive communications satellite experiment. Each of the two American spacecraft, launched in

(Continued on page 5)

1960 and 1964, was a metalized balloon satellite acting as a passive reflector of microwave signals, which were bounced off them from one point on Earth to another.

Echo I was launched on August 12, 1960.

An earlier test had created quite a stir. In the early morning hours of October 28, 1959, NASA launched a 110-foot -diameter sphere into the sky. However, the aluminum-covered balloon exploded as it was inflated high in the sky and rained down thousands of shiny fragments that many thought could be meteors or UFOs.

Father of Modern Rocketry

Robert Goddard was a rocket Pioneer and is often called the Father of Modern Rocketry was an American engineer, professor, physicist, and inventor who is credited with creating and building the world's first liquid-fueled rocket

Goddard was fascinated by science at an early age, especially after his father showed him how to generate static

electricity through the carpet. Young Goddard believed he could jump higher if he charged zinc batteries with static electricity. Despite his mother's warnings that he could "go sailing away and might not be able to come back," Goddard's father encouraged his curiosity, buying him a telescope, microscope, and subscription to *Scientific American*. He was fascinated with flight, especially kites and balloons. From this early age, he got himself in the habit of keeping detailed diaries of his experiments, a practice he carried through to his adulthood.

Next Article Space Era Stamps

Meteorite or Meteor Wrong?

by

Bill Biermann

The science fair at Incarnate Word grade school was a bustling affair. Anyone who has conducted a grade school science fair knows how active, excited (and noisy) these affairs can be. And if you are clouded out, you really have to be creative to hold everyone's attention.

Fortunately, we had 5 volunteers, with 5 different activities, and were successful in keeping the participants engaged. Dennis Latinette brought some binoculars, and kids enjoy looking at their friends across the room. Stephen Kelly staffed the library scope. Dennis and Stephen had taped some galaxies and the moon on the wall across the hall, and the participants had to track them down and view them. Buz McCollough printed out quite a few handouts about the night sky, and was able to engage some of the more mature participants about the night sky. Annalise Biermann brought an experiment from her science bag of tricks, which demonstrated heat transfer into a tube (ie body heat from your hand), which resulted in unequal air pressure pushing liquid up a tube, against the force of gravity!! Finally, Bill Biermann used one of the night sky kits called "Rocks from Space" to identify true meteorites from "meteorwrongs." (I may do a separate write up on these Night sky kits in the future). Over 185 participants enjoyed the activities, and we had just as much fun as the participants.

Left:

Stephen Kelly (left) and Dennis Latinette (Right) show off the library scope and binos

Right:

Annalise Biermann shows her heat/air pressure experiment

Left:

Buz McCollough (left) and Bill Biermann (right) engage a group of future scientists about Meteorite Identification.

Above, left and below: Don Ficken, Ron Sides, Rich Jennings and Mark Jones worked on Library Telescopes last weekend. Things like collimation, replacing or repairing eyepieces and red dot finders were the order of the day. If you would like to help with this work, contact Don Ficken or Mark Jones to find out more!

Speaker for August!!

The Collective is proud to announce our latest Assimilation!!! **Bradley Tsalyuk**, Exhibit Developer, Samuel Oschin Air and Space Center, California Science Center, will be making a Presentation, 16 August 2024, on the Space Shuttle Endeavour Exhibit. See photo to the left !!!!

St. Louis Astronomical Society
Devoted to the Interest and Advancement of the Science of Astronomy
Executive Board Meeting Minutes 1/4/2024

1. Opening Activities: a. Attendance: Jim Small, Brad Waller, Bill Winningham, Randy Harrison, Mark Jones, Larry Campbell, Dennis Latinette, Brent Buch, Bill Biermann, Jeremiah Taylor. b. Open Meeting: Meeting opened at 7:07pm c. Approval of last month's minutes. Motion to approved by Brent second by Larry, minutes approved d. Next Board meeting date (on approval of board): 2/1, 3/7, 4/4, 5/2, 6/6, 7/11, 8/1, 9/5, 10/3, 11/7, 12/5 Meetings will be via Zoom until further notice: Standing Action: SLSC Report by Will Snyder Action: Mark to send Board Meeting 2024 dates to Will Snyder. Mark sent dates to Will. Action closed

2. Upcoming General Membership meeting topics: a. Speaker: David A Williams, PhD. "ASU Explores the Solar System" b. Has room been scheduled at Wash U.? c. Who is recording meeting? d. Special Awards needed: None planned for this month but anniversary awards from November are still available to hand out e. Speaker Press Release and social media: not released yet. Jim has been trying to get meeting room scheduled, this is always difficult at start of each semester. f. Special Business – None g. A101 – Outreach training. Action: Larry to send the 2 awardees letter of congratulations. Also invite them to meeting. Completed, close action Action: Larry to send names and awards for plaques. Plates for perpetual plaque. Completed, close action Action: Jim S to order, pick up the plaques. Completed, close action Action: Jim Small to set up special Zoom link for Tim Russ. Completed, close action Action: Brent to upload meeting recordings for Sep-Dec. Response: From Brent. No, I cannot upload Aug, Sept and Oct to the website. I have started using a new computer and have Nov and Dec saved safely on the new machine. It is much easier to setup the videos in order so I would prefer to upload the newer ones after I've sorted out a way to extract data off my old hard drives onto my new Win11 machine. I'm having problem with my old computer that I had been using to record the Aug, Sep and October SLAS Meeting Zoom recording. There is a decompression/re-formatting tool in Zoom that runs after we stop the meeting. During the meeting some raw data is saved on your hard drive and this data MUST be converted to a usable MP4 or M4V movie file type in order to be able to upload it to the website. The decompression tool in the Zoom app started throwing unhandled memory exceptions on my PC and would Bluescreen and crash. I repaired my machine twice in an attempt to resolve and after the third month I gave up and bought a new computer because by then my Win10 os seems to be trashed and not booting properly. f. Hospitality: a. Budget – 2023 Budget $360, balance $96 Budget – 2024 Budget $360, balance $ Action: Larry to send out request for help on Hospitality

3. SLAS Financial Report a. Balance Sheet: total assets as of 11/30/2023 $86,379; Savings $76,123 b. Profit/Loss report: Income as of 11/30/2023: -$(3,872). c. Annual Budget meetings: Insert text in budget commentary to clarify depreciation amounts listed in past budgets. d. Corporate filings: 2024 Budget: $20, paid in even years only, not due until May 2024 e. Insurance; 2024 Budget $1165 f. Astro League Dues: 2024 Budget: $1070 Action: Need to get Bill and Jim together to reinvest CDs. Bill suggests changing to Commerce Bank for CDs. Will move at least $20,000 to CD's. Action: Treasurer asks that everyone get their 2023 expense reimbursements by end of day Friday so that I can close out 2023 and finalize the financials for the January Newsletter.

4. Speaker Committee If you are working on a Presenter, please keep Brad informed. Budget – 2023 Budget $400, Balance -$162 Budget – 2024 Budget $600, Balance $ Action: Brad to contact Brian May. Answer – Brian not able to do at this time. Action Closed b. Upcoming speakers:
SLAS Monthly Meeting Presentations 2024

Month	Name	Topic	Sponsor
19-Jan-2024	David A Williams, PhD	ASU Explores the Solar System	Arizona State University
16-Feb-2024	Angela Speck, PhD	Eclipse UT San Antonio	
15-March-2024	Tom Rathjen	The Moon and Beyond	NASA
19-April-2024*	Gautham Narayan, PhD	4 Meter Telescope in Chile	Univ of Illinois
17-May-2024	Fran Bagenal, PhD	Exploration of Jupiter System: Past, Present and Future	Univ of Colorado
21-June-2024	Steven R Gullberg	Archeo Astronom	Univ of Oklahoma
19-Jul-2024	Davies, Ashley G PhD	Juno, Close Flybys of Io	JPL
15-Nov-2024	Robert Zubrin	The Case for Mars	Mars Society

*Possible Live Speaker (Speaker budget may be used to pay for hotel room for speaker) d. Topics of interest e. Stipends f. Travel Action: Randy to contact Gautham Narayan from Univ of Illinois 4-meter telescope in Chile. Randy will give info to Brad at December meeting. Speaker has been booked. Action closed. Action; Brad to contact Cameron Moye a Wash U. grad student who works for Brad Jolliff at Washington U. He could probably speak at our meeting on his work on Lunar South Pole planning. Brad has sent emails to Cameron but no response, Brad will email Dr. Jolliff. As of early January, no response yet. Action: Jim needs to send Brad the contact Dr. Speck: Phone#; Mailing Address; E-mail Address; Bio Info and Topic Description

5. Membership Initiatives a. Budget – 2023 Budget $600, Balance $0 Budget – 2024 Budget $600, Balance $ Welcome Aboard Meetings – These have been replaced the following standing action. Standing Action: Mark Jones will send out member orientation materials when member joins. Also, schedule monthly member chat meetings are held via Zoom on the Thursday after the general meeting. c. Raffles – not planned
d. Attendance prizes – In-person and virtual members will be eligible for attendance prizes in 2024 Action: Engaging younger people with SLAS. Try live-stream from JCO via Twitch. Jim to perform dry-run of live stream and Brent. Link to how-to Twitch https://riverside.fm/blog/how-to-stream-on-twitch; https://twitchtracker.com/channels/live.

6. Membership Recognition a. Total Budget 2023 Budget $500, Balance $123 Total Budget 2024 Budget $500, Balance $ b. NSN Outreach Awards: Awards planned for February meeting. Members should update NSN volunteer hours by Jan 20th. c. Membership Report: December 2023 membership report showing 225 members. We have 25 few members than last year at this time with most notable decline in individual memberships (down by 23 members) d. Member anniversary – Next event is November meeting e. Special Award program -

1. Special Award Committee report: Chairman: Bill Biermann. Members: Larry Campbell, Jim Small, Mark Jones, Sharon Bertram, Fred Schovanez, Bill Neubert, Grant Martin, Bill Bierman, Rich Heuermann, Joe Marcus
2. Special Award deadlines: Current Nomination deadline is Sept 1st
3. Nomination reviews: by October 1st
4. Award selection: selections made in November
5. Awards presented at December meeting – Awards were presented at December 2023 meeting. Robert Cox Award presented to Dan Crowson and Richard Schwartz award presented to Christine Nobbe. Action: Bill Biermann to setup Specials Award meeting for early 2024 to discuss nominations. Target dates March and June Action: Jim to purchase 25 NSN pins for Outreach Awards. Action; Mark will create the NSN certificates and send to Brad for printing

7. Outreach - a. Budget – 2023 Budget $500, Balance $500 Budget – 2024 Budget $500, Balance $ b. Member Training Program Status: c. Purchase of T-shirts for volunteers completed training per budget: d. Purchase signs for outreach per budget: e. Upcoming outreach events: Indoor programming for First Friday at the SLSC and planning for STEM programs

(Continued on page 8)

(Continued from page 7)

Gateway Arch - March 23, 2024 (Saturday), May 11, 2024 (Saturday), June 14, 2024 (Friday), July 12, 2024 (Friday), August 10, 2024 (Friday), September 13, 2024 (Friday), Oct 18, 2024 (Friday) Francis Park – Dates for 2024: April 17, May 15, June 12, July 10, August 7, September 11, October 9
Tower Grove Park – April 13, May 18, June 15, July 13, Aug 10, Sep 14, Oct 12 DobsonFest – Sep 14 hosted by Riverbend Astronomy Club f. Awards/recognitions – g. NSN Outreach hours YTD: 2023: 1385 hours and 21 people have participated in 5 or more events. An additional 4 members have participated in 4 events. Action; Mark need T-shirt design. Mary and Joe Barteau volunteered to come up with T-shirt designs. Slideshow of examples sent to Board on 10-31-23. Action remains open until final design selected. Board preferred Safety Green in style #3 is preferred by Board Do they have t-shirt in a Tall/long?

8. Old Business:
Discuss issues with volunteers for star parties. Perhaps appoint a coordinator whose main job is to insure we have adequate number of members in the volunteer pool for events. Discuss methods to encourage members to volunteer for star parties. Try to find out why people aren't volunteering. Come up with an action for this issue. Possible actions: 1. convene a virtual meeting for all NSN coordinators to discuss volunteer ideas 2. Send email asking for a volunteer coordinator 3. Conduct monthly A101 about Outreach Training 4. have a new member events (1) welcome aboard and orientation; have new member events at JCO; new member telescope help events, mentor outreach. 5. Find Volunteer Coordinator for LTP program only Action: Mark to schedule a virtual meeting for all NSN coordinators to discuss volunteer ideas

9. New Business Scholarships from SLAS- Questions: How to fund via interest earned, How do we select candidates, do we need a committee, are there tax impacts for this, How do we define qualifications? Will we need to send 1099 form? Action: Brad to set up meeting to discuss how scholarship could be funded and executed. Brad would like to do an article for "The Reflector": How I got to have STAR TREK for a Monthly Meeting. What are the procedures? Brad should look in the Reflector magazine and contact the editor. SLAS Board does not require to approve Brad's article in advance of publication.

10. Other Committee Reports: If needed
A. SLSC Business: a. First Friday actions – TBD, none planned for January b. Other immediate business
B. SLCL Business a. Annual contract – No contract yet for 2024. b. Upcoming events – The Library rep tells Rich H that they are not ready to schedule SLAS Zoom events until the summer season.
C. Jefferson College Business: a. Committee Meeting report: Donated 12.5" Dob will be going into use at JCO. Mark has purchased a 5-step stool to reach the eyepiece. Action: Mark to submit receipt for step stool b. Upcoming Outreach Event: JCO – Jan 20, Feb 17, Mar 16, April 20, May 18, Jun 15, Jul 20, Aug 17, Sept 14, Oct 10, Nov 16 Action: Mark to buy replacement part for the RA motor encoder part # 820019. According to Meade. They don't have the item in stock at the moment, it might take a month or 2 until we get them. We can create the order so that when it becomes available, we'll let you know automatically. The cost would be $70.00 plus $15 for shipping.
D. Library Telescope Committee a. Budget – 2024 Budget none requested, expenses will be covered by escrow balance of $2460 b. Upcoming builds or maintenance events - Maintenance event in January c. Maintenance budget – none requested d. Mileage reimbursement – see above e. Promotional materials - none requested
E. SLAS Social Events a. Budget – 2023 Budget $365, Balance $123 Budget – 2024 Budget $390, Balance $ b. Homemade Fest - 2024 Budget $150. Target date is Feb 24, 2024 c. Star-B-Q – 2024 Budget, $240
Other
F. SLAS Brochures a. Budget 2023 $600, Balance $373 Budget 2024 $600, Balance $ b. Quarter cards –
G. Loaner scope Program a. Budget – 2023 Budget $ 100, Balance $0 Budget – 2024 Budget $100, Balance $0 b. New donations: None c. Replacement Parts for the LTPs d. Items for sale several:
1. Celestron CG-5 Equatorial Mount with add-on Polaris Drives on both Axis,hand control included, no telescope included.Compatible with Vixen Dovetail Telescopes. Extra dovetail plate included.Selling Price on e-bay $320-290, Asking Price; $125.
2. Orion LaserMate Collimator for Newtonian Telescopes. New price $55, Asking price $25
3. Celestron AstroMaster Newtonian Reflector Telescope with Equatorial Mount. 76mm aperture telescope. 1-1/4" Focuser, 10mm eyepiece included. Red Dot finder scope. Equatorial mount has broken dovetail casting and would need to be repaired. Price new is $170, Asking price $40.
4. 1980's Coulter Odyssey 8" Dobsonian Telescope, 1-1/4" focuser. No finder or eyepieces included. Selling price on Astromart $225, asking $150
5. Orion Apex 127mm (5") Maksutov-Cassegrain OTA only. Very good condition and clean. If you wan to use for astronomy, then you should purchase a 90-degree diagonal to replace the 45-degree erecting diagonal. New Skywatcher 127mm OTA sells for $465; asking price $250. Sold for $200
6. 4.25-inch f/10, Reflecting Telescope, Wooden Tripod, 6x30mm finder, 1 ¼ focuser, $10
7. Majestic Tripod Head-only, Heavy Duty head, w/1/4x20 screw mount, Mounts to 1.5" post, crank pivots head in altitude direction, $10
8. Small Equatorial Mount. Manual with slow motion knobs and counterweight. Similar to Sky-Watcher EQ-2 mount, $30
H. SLAS Library a. Budget – 2023 Budget $500, balance $54 Budget – 2024 Budget $200, balance $ Action: Jim to provide all new books, DVDs to Mark so he can inventory
Other – 2024 TSE. How do we want to prepare for the 2024 Eclipse? Add FAQ to website? Pick a SLAS location to observe? SLAS has received 2 Eclipse posters for Outreach activities, from Eclipse Taskforce. SLAS purchased 10,676 eclipse glasses in 2023. They are for sale and to give-a-way at Outreach Events. We have delivered about 2500 glasses so we have about 8,000 left. SLAS has 10 Sunspotter Telescopes to loan to schools and other organizations for the TSE A101 for February Twitch Presentation on the eclipse, maybe several
I. Merchandise Budget – 2023 Budget $650, balance $ Budget – 2024 Budget $100, balance $ 36 of the new coffee mug design are ready for sale to members. $10 each or two for $15
J. Telescope Making
K. Newsletter a. Budget 2023 $600, Balance $21 Budget 2024 $600, Balance $ Action: I submitted a couple of items and they were not published. Tim Russ Photos (Signed). Send your name to Europa. Wasn't room in newsletter dates have now expired. Close action item
L. Website - a. Budget 2023 $750, Balance $207 Budget 2024 $750 , Balance $ Action: FRANCIS PARK 2024. I have been asking for this to be updated since November 2023. Website has been updated. Action closed
M. Social 71 members of Private FB page 3117 followers on Public FB
N. Night Sky Network
O. SLASdialogs (part of Website Budget) SLAS Groups.io – 130 members Annual $110 account fee is coming due Jan 8th 3.2GB of 30GB is being used Action: Mark to submit $110 bill to treasurer
P. Dark Site – Special Use Permits have been received for Danville and Whiteside for 2024. Mark Jones created a step-by-step document on how to submit futures applications. A copy I stored in the groups.io folder linked https://groups.io/g/SLASDialogs/files/Permits.
Q. Observing Programs
R. Star Parties Donation:

11. Closing Activities:

Motion to adjourn the meeting by Brad, second Randy, Meeting adjourned 9:20pm

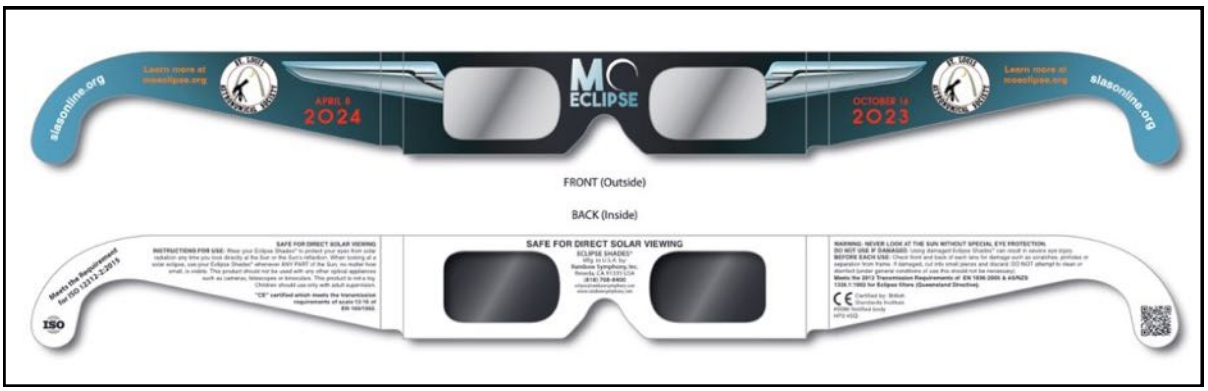
St. Louis Astronomical Society
Profit & Loss Budget vs. Actual
January 2024

	Jan 24	Budget	$ Over Bud...
Ordinary Income/Expense			
Income			
Events Income	200.00		200.00
Magazine Subscription	205.25	433.70	(228.45)
Membership Dues	285.00	475.00	(190.00)
Total Income	690.25	908.70	(218.45)
Cost of Goods Sold			
Magazine Subscriptions	206.69	433.70	(227.01)
Total COGS	206.69	433.70	(227.01)
Gross Profit	483.56	475.00	8.56
Expense			
1-Programs & Events		130.00	(130.00)
2-Newsletter	213.50	50.00	163.50
5-Loaner Scopes	11.84	25.00	(13.16)
6-Brochures		50.00	(50.00)
8-Website	110.00	400.00	(290.00)
9-Administrative Expen...	286.17	311.90	(25.73)
Total Expense	621.51	966.90	(345.39)
Net Ordinary Income	(137.95)	(491.90)	353.95
Other Income/Expense			
Other Income			
Interest Income	0.34	5.00	(4.66)
Total Other Income	0.34	5.00	(4.66)
Net Other Income	0.34	5.00	(4.66)
Net Income	**(137.61)**	**(486.90)**	**349.29**

St. Louis Astronomical Society
Balance Sheet
As of January 31, 2024

	Dec 31, 23	Jan 31, 24
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	12,083.69	11,847.85
Deposit, Certificate of	16,000.89	46,000.89
Library Telescope Escrow	1,964.87	1,964.87
PayPal	152.96	633.94
Savings - First Bank	43,138.18	13,138.52
SLAS Eclipse Conference Escr...	2,580.32	2,580.32
Total Checking/Savings	75,920.91	76,166.39
Other Current Assets		
Inventory Asset	841.87	841.87
Undeposited Funds	75.00	50.00
Total Other Current Assets	916.87	891.87
Total Current Assets	76,837.78	77,058.26
Fixed Assets	9,137.44	8,860.54
TOTAL ASSETS	**85,975.22**	**85,918.80**
LIABILITIES & EQUITY		
Equity		
Opening Bal Equity	8,497.66	8,497.66
Retained Earnings	81,754.13	77,477.56
Net Income	(4,276.57)	(56.42)
Total Equity	85,975.22	85,918.80
TOTAL LIABILITIES & EQUITY	**85,975.22**	**85,918.80**

Eclipse Glasses For Sale to SLAS Members SLAS 2023/2024 Eclipse Glasses have arrived! They will be available to purchase at our regular meetings or contact Mark Jones (secretary@slasonline.org) to pick up glasses anytime. Price $1 each, or 50 glasses for $35



Upcoming Star Parties and Other Events

For details on these and other upcoming events, check out the Night Sky Network Calendar linked on the Home Page for SLAS at http://www.slasonline.org

SLAS Executive Board Meetings All meetings are on First Thursdays unless noted. ***Note: Board meetings will be via Zoom until further notice.*** Dates 3/7, 4/4, 5/2, 6/6, 7/11, 8/1, 9/5, 10/3, 11/7, 12/5

SLAS Dark Sky Observing Dates All dates on Saturdays 3/9, 4/6, 5/4, 6/1, 7/6, 8/3, 8/31, 9/28, 10/5, 10/26, 11/2, 11/30, 12/28

Francis Park Events: These events are on Wednesdays of the week nearest the first quarter Moon 4/17, 5/15, 6/12, 7/10. 8/7, 9/11, 10/9

Aim for the Stars Public events held on 3rd Saturdays at the Jefferson College Observatory and Patio. 3/16, 4/20, 5/18, 6/15, 7/20, 8/17, 9/21, 10/19, 11/16, 12/21

Stargazing at the Arch Events for the public held at the Gateway Arch 3/23, 5/11, 6/14, 7/12, 18/10, 9/13, 10/18

Sky Orienteering Events For members who want to gather and do some relaxed observing at Babler State Park (BSP) or at the Jefferson College Observatory (JCO) Please RSVP if you plan to come!

SLSC Public Telescope Viewing Events: These events are held the first Friday of the month Planetarium shows start at 7pm

Dobsonfest - Sept 14 hosted by Riverbend

Pattonville Observatory Public Viewing Dates 2022-2023: 2/22, 3/8, 3/22, 4/12, 4/26, 5/3, 5/10

Broemmelsiek Astronomy Park Public Viewing Every Friday

UMSL Observatory
For directions and map http://www.umsl.edu/~physics/About%20the%20Department/astro.html All sessions include viewing of 1st quarter Moon with additional objects Skywatch Hotline: 314-516-5706
Saturdays:

LET US KNOW YOU ARE COMING!

To RSVP for any of these events log in to the Night Sky Network and submit your RSVP. If the event is canceled, you will be notified immediately according to the preferences you have selected.

SLAS Events

February

16 Fri	SLAS Regular Meeting
17 Sat	Aim for the Stars at JCO
20 Tue	Eclipse Education at O'Fallon, IL Library
22 Thur	SLAS New Member Zoom
24 Sat	Homemade Fest

March

5 Tue	Belleville Aging Eclipse
5 Tue	Eclipse Education Freeburg
6 Wed	Solar Eclipse Presentation
7 Thur	SLAS Board Meeting
8 Fri	Admire the Stars Party
9 Sat	Star Party at Laumeier
9 Sat	SLAS Dark Sky at Danville
10 Sun	Solar Sunday
12 Tue	Eclipse Education Event
12 Tue	Eclipse Education Event
13 Wed	Mascoutah Library
14 Thur	Eclipse Best Practices Riverside
15 Fri	Blessed Sacrament Star Party
15 Fri	SLAS Regular Meeting
16 Sat	Aim for the Stars at JCO
17 Sun	Solar Sunday
19 Tue	Scott AFB Eclipse Talk
22 Fri	Stacy Park
23 Sat	Gateway Arch Eclipse Program
23 Sat	Mastodon Fair
24 Sun	Solar Sunday
28 Thur	SLAS New Member Zoom
30 Sat	Let's Talk About Space
31 Sun	Solar Sunday

April

2 Tue	Pre-Clipse
4 Thur	SLAS Board Meeting
6 Sat	SLAS Dark Sky at Danville
8 Mon	Total Solar Eclipse
13 Sat	Tower Grove
14 Sun	Stacy Park
16 Tue	Manchester Park
17 Wed	Francis Park
18 Thur	Stargazing at the Gateway Arch
19 Fri	SLAS Regular Meeting
20 Sat	Aim for the Stars at JCO

For other events, watch the calendar on the website. Virtual stargazing events and other online activities will be registered there. We hope you can join us for some of these activities!

SLAS Merchandise Available

SLAS merchandise is now set up for embroidery at **Headz n Threadz at www.headznthreadz.com**

There is now only one location:
1065 Regency Parkway, St. Charles MO 63303
Telephone: 314.528-8100
sales@headznthreadz.com
Simply take the garment, hat, etc you wish to have embroidered and they will take care of it. They have the SLAS logo on file. You may make modifications to the colors if you wish.
SLAS Logo is also available at www.Infini-tees.com

SLAS MEMBERSHIP APPLICATION

Name: Last _____

First, Middle Initial _____

Address _____

City, State, Zip Code _____

email address _____

Please send completed form with check (no cash please) made payable to

St Louis Astronomical Society

Don Ficken, Membership
13024 Barrett Crossing CT
St. Louis, MO 63122

Youth @ $10.00 / 1 year (18 yrs or younger) $_____

Individual @ $25.00 / 1 year $_____

Family @ $40.00/1 year $_____

Publications with discount available with your SLAS membership:

Sky and Telescope @ $45.75 / 1 year $_____

(S&T may also be renewed at their website: http://www.skyandtelescope.com)

Astronomy @ $34.00 / 1 year $_____

TOTAL ENCLOSED **$_____**

Check all that apply:

___ Renewal
___ Address Change Only
___ Please send my newsletter by regular mail
___ ***New Member!***

SLAS OFFICERS

President ***Jim Small*** 314-307-0692
president at slasonline.org

Vice President ***Bradley R Waller*** 314-481-7250
vicepresident at slasonline.org

Secretary ***Mark Jones*** 636-394-2342
secretary at slasonline.org

Treasurer ***Bill Winningham, (Don Ficken - membership)***
treasurer at slasonline.org 636-357-2763

Hospitality ***Larry Campbell*** 636-244-2867
hospitality at slasonline.org

Board Members at Large

Brent Buch 314-239-0329
board24 at slasonline.org

Randy Harrison 618-267-1659
board25 at slasonline.org

Dennis Latinette 314-713-9258
Board26 at slasonline.org

ALCOR ***Bill Winningham*** 636-357-2763
(Astronomical League Correspondent)
treasurer at slasonline.org

MSRAL Rep. ***Peggy Walker*** 918-640-0832
msral_rep at astroleague.org

COMMITTEE CHAIRS

Dark Site Coordinator ***Mark Jones*** 636-394-2342
darksite at slasonline.org

Librarian ***Jim Small*** 314-909-7211
librarian at slasonline.org

Library Telescope Program ***Don Ficken*** 636-851-9630
librarytelescope at slasonline.org

Loaner Equipment ***Greg Gaines*** 314-277-3082
loaner at slasonine.org

Merchandise ***Vacant***
merchandise at slasonline.org

Membership ***Don Ficken*** 636-225-0269
membership at slasonline.org

Newsletter Editor ***Jim Small*** 314-909-7211
newsletter at slasonline.org

Observing Programs ***Mark Jones*** 636-394-2342
observing at slasonline.org

Publicity ***Rich Heuermann*** 314-962-9231
publicity at slasonline.org

Recognition ***Larry Campbell*** 636-244-2867
recognition at slasonline.org

Social Media *Vacant*

'SLASdialogs' Moderator ***Mark Jones***
dialogsmoderator at yahoo.com

Star Party Coordinator ***Bill Breeden*** 314-276-3613
starparty at slasonline.org

Telescope Making ***Bill Davis, Jim Melka*** 314-469-3061
telescope at slasonline.org

Webmaster ***Jim Small*** 314-909-7211
webmaster at slasonline.org

Devoted to the Interest and Advancement of the Science of Astronomy

ST. LOUIS ASTRONOMICAL SOCIETY

We're on the Web!
http://www.slasonline.org

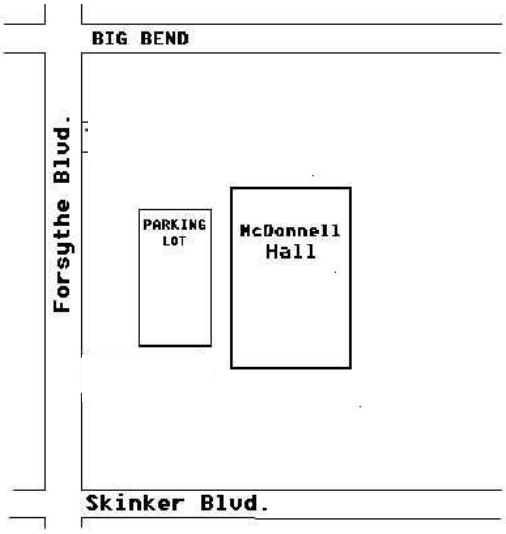
Follow us on
Twitter: @stlastro
Facebook: @stlastro

Who We Are and What We Do

St. Louis Astronomical Society is a not-for-profit organization established in 1936. SLAS is devoted to the interest and advancement of the science of astronomy. Our mission is to promote an understanding of the science of astronomy to our members and to the public. Membership is open to anyone with an interest in astronomy.

For more information contact any SLAS officer or visit our website listed above. SLAS is affiliated with the Astronomical League, Night Sky Network and the Mid-States Region of the Astronomical League.

Meetings are held the 3rd Friday of each month at McDonnell Hall at Washington University. See the map to the right for directions.



St. Louis Astronomical Society
Jim Small
13128 Cozyhill Drive
St. Louis, MO 63122