THE EVENT HORIZON

ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

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How We Stacked a Space Shuttle in Downtown L.A.

by

Bradley Tsalyuk
California Science Center

Bradley Tsalyuk, Exhibit Designer at the Samuel Oschin Air and Space Center of the California Science Center, will be featured at the August meeting of the Saint Louis Astronomical Society.

The Oschin Air and Space Center is now under construction on the campus of the California Science Center in Los Angeles. It will include three multi-level galleries – Aviation, Space and Shuttle. The Shuttle gallery is being built around a fully assembled NASA Space Shuttle. The Endeavour successfully completed 25 missions in space, including the first mission to service the Hubble Space Telescope. Following the close of the Shuttle program, NASA transferred the Endeavour to the California Science Center in 2012, where it has now been viewed by over 20 million visitors. The 122-foot-long orbiter weighs 178,000 pounds and has a wingspan of 78 feet. It is stacked on top of two solid-fuel rocket boosters and bolted to a large external fuel tank. The total "stack" is over 200 feet tall. Mr. Tsalyuk will provide an overview of the display project and closer look at the process for assembling, moving, and installing the space shuttle stack. The California Science Center will be the only place in the world to see a complete Space Shuttle System with a flown orbiter mated to real solid rocket boosters and ET-94, the last remaining flight-qualified external tank.

Bradley Tsalyuk is an Exhibit Developer at the California Science Center, where he helps create engaging, educational exhibits that inspire a love for science. Currently he is working on the Samuel Oschin Air and Space Center, a 200,000 square foot addition to the Science Center. Previously, he worked for seven years at the San Diego Natural History Museum and The New Children's Museum.

Upcoming meetings:
September: Joseph Marcus, MD, ""Who Discovered the Expanding Universe? Spoiler: Not Hubble!"
October Pamela Gay, PhD, "Secret Squirrel Stuff", Planetary Science Institute
November: Robert Zubrin, PhD. "The Case for Mars"; The Mars Society
December 2024: Robert Reeves; "Postcards from the Moon"; LPOD Harvard University

Meeting Room Back to Normal: McDonnell Hall 162!
August 16 Meeting will be In Person and Online!

The meeting will begin at 7:30 PM Friday, August 16 in **McDonnell Hall 162** on the Danforth campus of Washington University. 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://us02web.zoom.us/j/8604505790?omn=85006281314

SLAS to Discontinue Processing Magazine Subscriptions Via Membership by September 1

Beginning September 1, magazine subscriptions will no longer be available along with your membership dues. You will still be able to get the club discount.
More info on the next page.

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President's Corner
by Jim Small

Phoenix is hot. Doesn't matter if it's a dry heat when its 113 degrees in the shade. Had a great visit out west. In the process, I cleaned out my house! Turns out Bill from Telescope warehouse lives just a couple of hours from Phoenix, so I loaded up a bunch of scopes and tripods I wanted to sell and he was willing to pick up! I sold my ETX 70, 4.5" Newtonian, a super Polaris mount and another equatorial mount and a Meade electric focuser. Netted $370 for my part. I also took the Orion 190mm Mak-cas and mount we were wanting to sell and another Meade 4.5" reflector. Bill gave SLAS $800 for that pair!! So, loaded up the car on the way down and it was empty after I went to Phoenix! I didn't have to drive to meet Bill, he has a friend that lives 40 min from where I was in Phoenix, so I took everything to his place. This guys house was FULL of telescopes!!! Move over Steve Sands/Thane Bopp… you guys don't have anything on this guy! Pics available on request. (including the nice 5" f15 refractor!)

On the way back I attended a conference with my Particle physics group in Albuquerque. We took one day during that conference and drove up to Langmuir Lab at over 10,000 feet. They research lightning there! Interesting operation, including firing rockets dragging wire up into the clouds to encourage lightning strikes with VERY high speed cameras rolling. By the way, the road to the top was 12 miles of a road worthy of a Jeep commercial with extreme switchbacks with hairpin turns and sheer drop offs! Slow going but worth the trip. Working on getting the people to do a presentation for us.

McDonnell Hall is back with us for the meetings again and they have improved the equipment in the room. It's very nice now. I'll see you at meeting Friday night, then star party Saturday night at Jefferson College Observatory. Come on down and set up and join us!

We WILL cease filling subscriptions for magazines for members September 1st. Information is available for getting the club discount on your own. See the article below!

There are a lot of star parties coming up. Be sure to RSVP! See you in outreach. Thanks for those that have been coming!

Sincerely, |
Jim Small

SLAS Memberships Expiring in August

Thane & Marlene	Bopp
Bo	Cooper
Scott	Devine
Frederick	Fischer
David	Harris
Robert	Kessler
Kenneth	Levy
Richard	Mooney
Caren	Nader
Phyllis	Nolan
C M	Sabinash
Emily	Schiltz
James	Tyrrell
Beverly & David	Wrobel & Family

SLAS Memberships Expiring in September

Russ	Baco
William F.	Davis
Lawrence	Doepke
Steven	Hahn
Kunal	Kotkar
Thomas C.	Kuehlin
Steven	Lambertson
Gregory	Lunte|
Holly	Mahl-Hubbs
James T.	Melka
Catherine	Mizerany
William J.	Neubert
John	Newcomer
Brian	Railey
Gary	Runge
Orevia	Vongsa
Dr. Bruce A.	Wilking
Thomas&Cathy	Williams

SLAS Will No Longer Process Magazine Subscriptions
by Bill Winningham

Effective September 1, 2024 SLAS will no longer be processing magazine subscriptions for members. We can no longer perform this function for members due to the detailed information, such as subscription number, email address and login information required by the magazine providers to process subscriptions. Members will still have access to the club member rates by utilizing the following links.

Sky and Telescope
New Subscriptions -
https://skyandtelescope.dragonforms.com/loading.do?omedasite=SKY_ren_print_club

Renewals -
https://skyandtelescope.dragonforms.com/loading.do?omedasite=SKY_new_club

Astronomy Magazine

https://kalmbach.dragonforms.com/loading.do?omedasite=ASY_Club&pk=2PA4C1

Bill Winningham

Treasurer

St. Louis Astronomical Society

treasurer@slasonline.org

Editors note: The links will be made available on the web page and in the back of the newsletter on the join page. They will also be uploaded to SLASdialogs.

Another source of good astronomy information may be had via Star Date magazine, a product of McDonnell Observatory. There are daily radio broadcasts, bi montly magazine along with other goodies astronomers will be interested in. Below is a link to the Star Date page:

https://stardate.org/

PS If you subscribe to SkyTips email newsletter, you will get a 15% discount code!

SLAS PICNIC QUIZ REVIEW
by Rick Menendez

SLAS had its annual picnic at Stacy park on Saturday August 3rd. Mark Jones did a great job renting the shelter and providing most of the food. As is tradition, last year's winner of the quiz was responsible for writing this year's quiz and that was me.

My focus on this test was to cover a variety of topics that we haven't covered in the past. I tried to make it somewhat similar to the quizzes I've given to my astronomy students but also focus on topics that SLAS members might find interesting and that they could learn from. Since we were a few miles away from what was once McDonnel aircraft, now Boeing, I had many questions on spaceflight. Specifically I focused on the Mercury capsule and the astronauts who flew it and other spacecraft later on. Other topics included space physics, telescope optics, questions about the planets and constellations.

My one oral question, since I forgot to include it on the

paper test, was about Brian May of the rock band Queen who is unusual among big rock stars in that he has a Ph.D. in astrophysics. The last question was about 4 woman who made major contributions to astronomy and space but who have been largely overlooked by history. Jocelyn Bell who discovered pulsars/neutron stars, Henrietta Leavitt who discovered the period/luminosity ratio which used Cepheid variable stars which allowed astronomers to determine distances and this the size and scale of the Universe and ultimately how old it is and how it got started. Neither of these women got the Nobel prizes they deserved. Instead they went to their male supervisors. This historic injustice has yet to be rectified

The role of Hollywood in science was part of this question too Hedy Lamar (not Hedley as a few members said, he was a fictional character in the comedy movie Blazing Saddles) was a beautiful 'A' list movie star leading lady who invented among other things the technique called frequency shifting which prevents radar from being jammed. She did this in her spare time between takes on the set. It is also the basis of GPS, Wi-fi and other modern technologies. She also invented a better aircraft wing by studying high speed birds and this attracted the attention of aircraft mogul Howard Hughes as well as many other inventions.

Finally, Lucille Ball who was at that time in charge of DesiLu studios. It was her desire to bring the studio into the modern age that led her to approve the idea of producing Star Trek series to the air. Without her this groundbreaking series to the airwaves.

Back to the quiz, the winner was a tie between Grant Martin and Mark Jones who both got 56 correct out of a

possible 63. As is tradition the person with the closet predicted score won first place and the honor/duty of writing next year's quiz. Now Grant is making the claim since he and Mark Ties they should both have the honor/ be forced to write it but we'll have to see how Mark and the SLAS board feels about this…haha. Others who scored above 50 points were one of SLAS's most senior members Wayne Clark, Al Flav, Fred Schwartz Larry Campbell, Greg Riegleman and Carl Matheysy

Mark Joes did a great job providing some wonderful prizes for the top scorers and he brought enough prizes so everyone who participated got at least something to take home. Mark also had the unenviable job of cooking the burgers and brisket in the high temperatures and high humidity of that day so everyone owes him a lot of thanks for his efforts. I was rewarded by being mugged with a cherished SLAS coffee mug for writing the exam.

I hope everyone enjoyed the picnic and my exam. I can't wait to see what Grant and or Mark come up with for next

Photos from Stacy Park by Mark Jones

DOBSON-FEST 2024

Dobson-Fest 2024 is being held at Coles Creek Boat Ramp at Carlyle Lake on Saturday, September 14, 2024 from 4:00 to 9:00pm. This year's event is hosted by River Bend Astronomy Club and there is no charge for admission or parking. Come see all kinds of telescopes, including Dobsonian telescopes. Talk to local amateur astronomers for information. Bring your own telescope for viewing, or assistance from our astronomers with setup, operation, or maintenance.

There are several activity and information tables for both adults and children. Register for attendance prizes including a StarSense Explorer 8" Smartphone App-Enabled Dobsonian Telescope (Donated by Celestron) and an Explore Scientific 10-inch Hybrid Truss Tube Dobsonian Telescope - DOB1045C (Donated by Explore Scientific and Lookin' Up Optics) There is a food truck on the grounds for food and beverages.

For information, maps, and schedule, go to **Riverbendastro.org**[/dobfest2024.](/dobfest2024)

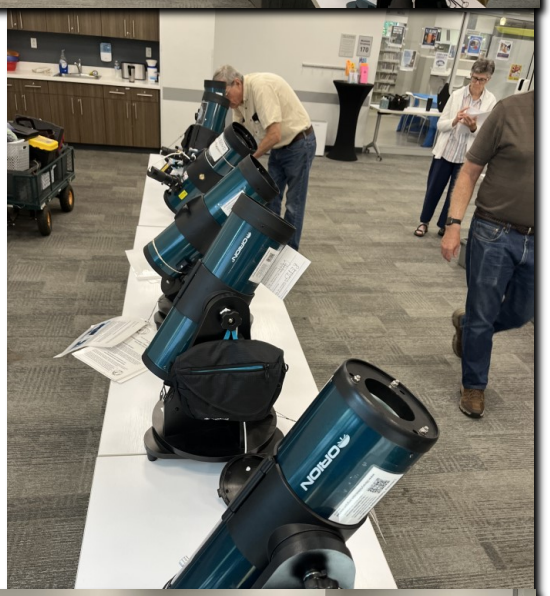
Dobson-Fest 2024

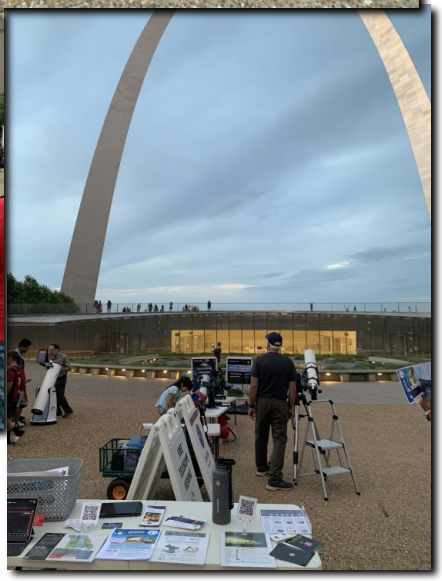
Saturday, September 14, 2024
4:00 to 9:00 pm
Coles Creek at Carlyle Lake, Illinois
Hosted by the River Bend Astronomy Club
Riverbendastro.org/dobfest2024

CO-SPONSORS:

SLAS members working at a library telescope maintenance session.

About 15 scopes were upgraded or repaired as needed. This is important work to keep the library telescopes in usable condition for checkout. If you are interested in helping with this kind of work, please let Don Ficken know and he will keep you informed. 2-4 maintenance events are scheduled every year as needed by the program





A great evening stargazing at the Gateway Arch! If you haven't participated in an Arch event, it is unique for the terrific variety of people that attend from all parts of the world! 2 left to attend!

Eastern Iowa Star Party
by
Robert Mitchell

The Quad Cities Astronomical Society is hosting its annual Eastern Iowa Star Party on two weekends this year, August 30-31 and September 27-28, at the Menke Observatory, located at the Wapsi River Environmental Education Center near Dixon, Iowa. No fee required and no registration form needed, but space is available first come, first serve, so please RSVP soon at the below email address with the following information:

Robert Mitchell rcm1970@msn.com

1. Which weekend will you be attending? Aug 30-31, Sept 27-28, or both?
2. Will you need electricity?
3. Do you plan on doing astrophotography, visual, or both?

Be sure to check out the observatory's new roll-off building!

Robert Mitchell
President, QCAS

For Sale
by
Jim Small

I have the following equipment for sale.
Prices are negotiable. Contact me at 314-307-0692 or jrsmall@earthlink.net if you are interested in anything.

1. Nikon D700 full frame DSLR body, two batteries, charger, card and card reader. Will take ANY Nikon lens, old or new. $300 OBO
2. Nikon Lenses. 300mm, 200mm, 70-200mm zoom.
3. Case for cameras and lenses make an offer
4. Stellarvue travel tripod and M2 alt-az mount. Beefy mount that will handle any scope you want to attach to it. Smooth action. Very sturdy tripod. $300
5. Meade ETX LS 6" with wifi controller. EXCELLENT optics. Autostar III controller not working. Have compatible SkyFi wifi controller that will substitute. Working on getting it operational. Optical tube alone is worth it. $650

For Sale: Price cut in half! Now $400

17.5 inch Dobsonian Telescope

-Coulter mirror (around 1996?) F4.5 ?
-no viewfinder
-K 25mm eyepiece
-"tube" 22.25inch x 22.25inch x 76.5inch wood frame plus 1/8 inch panel
-base 27.25inch x 27.25inch x 32inch 3/4 inch plywood
-height when assembled 84.5 inches

Contact Steve in Clayton, Missouri

At (314) 591-7349

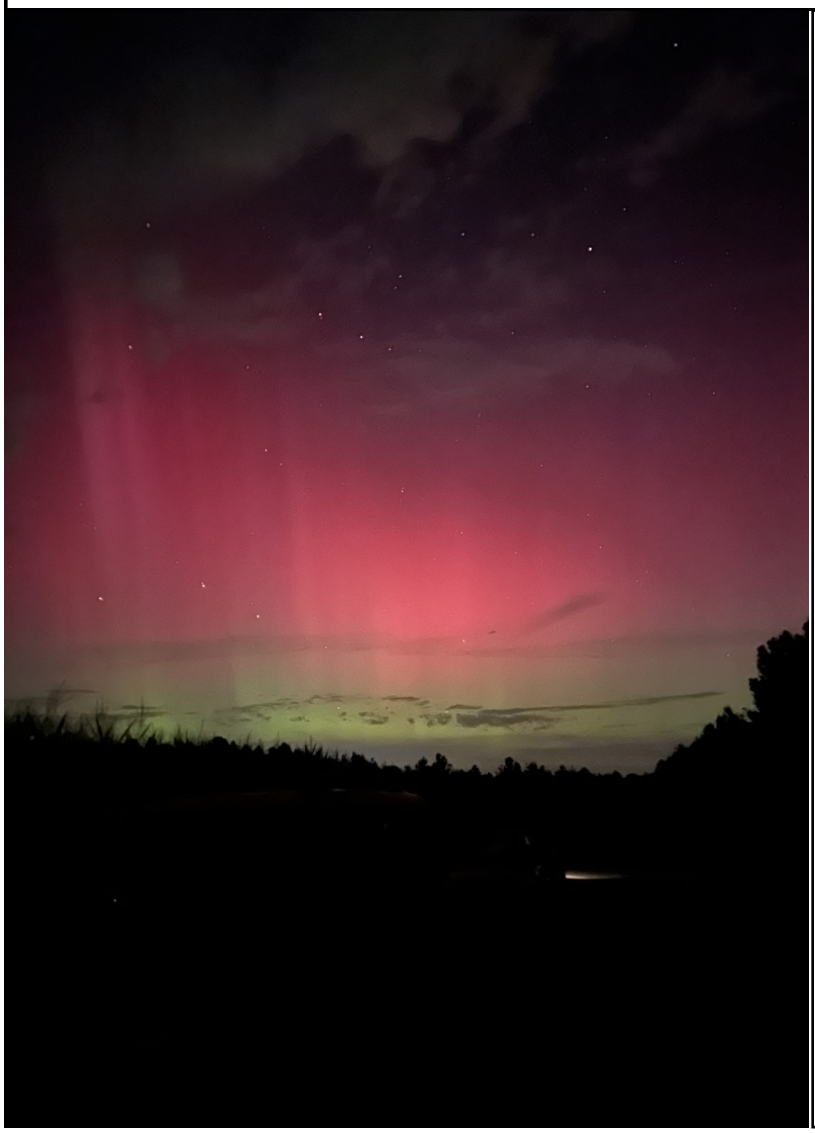
Aurora *by* Randy Harrison.

Sunday night, August 11 a group of us got together, went out to our dark site Although we have partly cloudy skies, we were there to watch the Perseid meteor shower. We did see a nice selection of meteors fighting the partly cloudy skies.

Then at 1:12 AM the North sky was red and you could see the bright streaks of the Aurora

It stayed bright for about 15 to 20 minutes

Photos taken with an iPhone 14



St. Louis Astronomical Society Executive Board Meeting Minutes 6/6/2024

1. Opening Activities: a. Attendance: Jim Small, Brad Waller, Dennis Latinette, Randy Harrison, Mark Jones b. Open Meeting: Meeting opened at 7:07pm c. Approval of last month's minutes. Motion to approve June by Jim and second by Randy, minutes approved d. Next Board meeting date (on approval of board): 8/1, 9/5, 10/3, 11/7, 12/5 Meetings will be via Zoom until further notice: Brad will not be at the August Board meeting Action: Plan 10th anniversary for LTP at October SLAS meeting. Standing Action: SLSC Report by Will Snyder Nova T Corona Borealis - SLSC would certainly like to host an observing night or two around the nova, but it will be hard for us to commit to anything concrete until the outburst occurs and we know the exact timing. The Science Center has a lot of hoops for me to jump through in terms of staffing and other event scheduling conflicts, but we've started the discussion internally in hopes that we can offer an observing night at a moment's notice.
2. Upcoming General Membership meeting topics: a. Speaker: Ashley G Davies PhD, Juno, Close Flybys of Io, JPL b. Schedule room at Wash U. Back in McDonnell Hall. Action: Jim bring portable speaker for meeting needed for McDonnell Hall starting July meeting c. Who is recording meeting? Assume it's Brent d. Special Awards needed Handout leftover Anniv and Outreach certificates e. Speaker Press Release and social media: Done, mug has been mailed to Dr. Davies f. Special Business – g. Announcements: A101 – Nova TCrB, Mark f. Hospitality: a. Budget – 2024 Budget $360, balance $270 Action: Dennis to buy diet soda for July meeting
3. SLAS Financial Report a Balance Sheet: No report, Bill will send report later this week b. Profit/Loss report: c. Annual Budget meetings: start in September d. State Corporate filings: 2024 Budget: $20, paid in even years only, not due until August 2024. Federal Form 990 due May 15th, this form was submitted on 5-15-24. e. Insurance: typically, due in May each year f. Astro League Dues: 2024 Budget: $1070, AL sends invoice around July Action: change current price of Astronomy Magazine $34 to $40 in newsletter (Jim S), brochures (Jim S.) and website PayPal (Bill).

(Continued on page 8)

(Continued from page 7)

4. Speaker Committee If you are working on a Presenter, please keep Brad informed. Budget – 2024 Budget $600, Balance (-$195) b. Upcoming speakers:

SLAS Monthly Meeting Presentations 2024

Month	Name	Topic	Sponsor
19-Jul-24	Ashley G Davies PhD	Juno, Close Flybys of Io	JPL
16-Aug-24	Bradley Tsalyuk	Space Shuttle Endeavour Exhibit	CA Science Center
21-Sep-24	Joseph Marcus, MD	Who Discovered the Expanding Universe? Spoiler: Not Hubble!	SLAS
18-Oct-24	Pamela Gay, PhD	Super-Secret Squirrel Stuff	Area 42
15-Nov-24	Robert Zubrin	The Case for Mars	The Mars Society
20-Dec-24	Robert Reeves	Postcards from the Moon	Perspective Observatory
17-Jan-25	Bhupal Dev, PhD	Finding New Physics in Debris from Colliding Neutron Stars	Wash U
21-Feb-25	K Michael Malolepszy	Probing the Sub-Microwave Universe Part III	SLAS
21-Mar-25	Tom Rathjen	What's Happening in Human Space Flight	NASA
14-Apr-25	Avi Loeb, PhD.	The Search for Extra-Terrestrial Life and Our Future in the Stars	Harvard University
16-May-25	SLAS Panel	New Digital Telescopes	SLAS Members

*Possible Live Speaker (Speaker budget may be used to pay for hotel room for speaker)

d. Topics of interest - e. Stipends f. Travel

5. Membership Initiatives a. Budget – 2024 Budget $600, Balance $300 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. Action: Mark to convert new member questionnaire from Word doc to Google survey. Close action as people might be concerned about Google getting their data. c. Raffles – not planned d. Attendance prizes – In-person and virtual members will be eligible for attendance prizes in 2024.

6. Membership Recognition a. Total Budget 2024 Budget $500, Balance $456 b. NSN Outreach Awards: Awards made in Feb each year c. Membership Report: The June 2024 Membership report for SLAS. We had 243 members at the end of June 2024. This is a gain of 20 members over June 2023. In particular, family memberships has shown noted growth. d. Member anniversary – Next event is November meeting e. Special Award program - 1. Special Award Committee report: Chairman: Bill Biermann. Next committee meeting was June 26 at 6:30pm. Rich Heuermann has resigned from committee. Committee has approved the proposed wording changes to Special Award process. The website will need to be updated. Action: Mark Jones to make update website with new wording that was approved by Special Awards Committee. 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 –

7. Outreach - a. Budget – 2024 Budget $500, Balance $250 b. Member Training Program Status: c. Purchase of T-shirts for volunteers completed training per budget: 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? d. Purchase signs for outreach per budget: e. Upcoming outreach events: As of May 28th, we have 61 events scheduled for rest of 2024 Gateway Arch - July 12 (Friday), August 10 (Friday), September 13 (Friday), Oct 18 (Friday) Francis Park – July 10, August 7, September 11, October 9 Tower Grove Park – July 13, Aug 10, Sep 14, Oct 12 DobsonFest – Sep 14 hosted by Riverbend Astronomy Club First Friday –None in May, June 7. Events for July-Dec still being finalized Solar Sunday – 7/7, 7/14, 7,21, 7/28, 8/4, 8/11, 8/18, 8/25, 9/1 Action: Mark to add Dobsonfest including details for location and times to NSN calendar and solicit volunteers. Committee meeting held July 8th. Randy has meeting RBAC on Sat July 13th. f. Awards/ recognitions – g. NSN Outreach hours: Total Hours Reported in NSN: 463 hours as of July 1, 2024

8. Old Business: A. 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. Coordinator Meeting Report: We increased the number of NSN coordinators from 12 to 20, and we held a meeting (1/31/24) to discuss how to get more volunteers. Decision was made to create a call list and call each member an ask them if they wish volunteer. Timeline: final Script by 2-11-24; final Email by 2-14-24; final Call list by 2-23-24; calls made: starting 2-23-24 end call by 3-10-24. Action: Mark to send call list to the NSN coordinators

9. New Business Action: Awards Committee to review and concur their approval. Committee approved wording for Special Recognition Award criteria and action is closed

10. Other Committee Reports: If needed

A. SLSC Business: Planetarium parking lot and entrance is now open a. First Friday actions – see above b. Other immediate business

B. SLCL Business a. Annual contract – No contract yet for 2024. b. Upcoming events – Virtual Program: A Tourist's Guide to Mars, by Rich Heuermann on July 16th

C. Jefferson College Business: a. Committee Meeting report: Meeting held July 1st. Meeting at JCO on July 13th with Dr. Gokhale (TSU) to work on integrating QSM and All-Sky. b. Upcoming Outreach Event: JCO –Jul 20, Aug 17, Sept 14, Oct 10, Nov 16

D. Library Telescope Committee a. Budget – 2024 Budget none requested, expenses will be covered by escrow balance of $1836 b. Upcoming builds or maintenance events – Don performing most maintenance c. Maintenance budget – none requested d. Mileage reimbursement – see above e. Promotional materials - none requested

E. SLAS Social Events a. Budget – 2024 Budget $390, Balance $ 254 b. Homemade Fest - 2024 Budget $150. Balance $13.81 c. Star-B-Q – 2024 Budget, $240, Balance $ 240 Report: Star-B-Q 2024 has been scheduled for August 3, 2024 at Stacy Park in Olivette. Event has been added to NSN calendar

Other

F. SLAS Brochures a. Budget 2024 $600, Balance $300 b. Quarter cards – YTD 1000 cards printed. Quartercard artwork updated to add "In memory of Capt. James M. Moody"

G. Loaner scope Program a. Budget – 2024 Budget $100, Balance $88 b. New donations: Friends of former SLAS member Richard Hoffman donated his Edmund Scientific AstroScan. c. Replacement Parts for the LTPs - d. Items for sale several:

H. SLAS Library a. Budget – 2024 Budget $200, balance $200

I. Merchandise Budget – 2024 Budget $100, balance $100 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 2024 $600, Balance $180 (postage+toner)

L. Website - a. Budget 2024 $750, Balance $406 Purchased security protection for website approx $80

M. Social Media Platforms: Facebook Private (https://www.facebook.com/groups/slasonline): 76 members Facebook Public (https://www.facebook.com/stlastro): 3217 followers Twitter (https://twitter.com/stlastro) : Instagram (https://www.instagram.com/stlouisastro/) : TikTok (https://www.tiktok.com/@stlouisastro?): LinkedIn (https://www.linkedin.com/groups/14251117/): YouTube (https://www.youtube.com/channel/UC6xO5niZnSeeOUSmp5PRz4A): Helpdesk – Using the contact-us form on our website (https://www.slasonline.org/contact-us), visitors can ask questions of SLAS. These requests are automatically forwarded to the contactus@slasonline.org and given a sequential "submission #". Submission #1 was received around 12-1-2022. By 12-27-2023 we had received submission #175. As of 7-11-2024 we had received submission #396.

N. Night Sky Network

O. SLASdialogs (part of Website Budget) SLAS Groups.io – 140 members Annual $110 account fee is due in January each year 3.2GB of 30GB is being used

P. Dark Site – Special Use Permits have been received for Danville and Whiteside for 2024 are stored in the groups.io folder linked https://groups.io/g/SLASDialogs/files/Permits.

Q. Observing Programs

R. Star Parties Donation: see Treasurer report

11. Closing Activities: Motion to adjourn meeting by Brad seconded by Dennis. Meeting adjourned at 8:54pm

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

	Jan - Jul 24	Budget	$ Over Bud...
Ordinary Income/Expense			
Income			
Events Income	1,303.59	250.00	1,053.59
Magazine Subscription	1,788.00	1,523.15	264.85
Membership Dues	2,990.00	2,820.00	170.00
Total Income	6,081.59	4,593.15	1,488.44
Cost of Goods Sold	1,296.94	1,523.15	(226.21)
Gross Profit	4,784.65	3,070.00	1,714.65
Expense			
1-Programs & Events	1,560.53	1,910.00	(349.47)
2-Newsletter	617.50	350.00	267.50
3-Library expense		100.00	(100.00)
5-Loaner Scopes	122.54	75.00	47.54
6-Brochures	460.40	350.00	110.40
7-Insurance	1,163.09	1,165.00	(1.91)
8-Website	588.25	400.00	188.25
9-Administrative Expenses	2,015.62	2,273.30	(257.68)
Jefferson College Observat...	142.83		142.83
Total Expense	6,670.76	6,623.30	47.46
Net Ordinary Income	(1,886.11)	(3,553.30)	1,667.19
Other Income/Expense			
Other Income			
Donations	690.00		690.00
Interest Income	843.80	30.00	813.80
LTP Receipts	66.45		66.45
Total Other Income	1,600.25	30.00	1,570.25
Other Expense			
LTP Disbursements	1,187.14		1,187.14
Total Other Expense	1,187.14		1,187.14
Net Other Income	413.11	30.00	383.11
Net Income	**(1,473.00)**	**(3,523.30)**	**2,050.30**

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

	Dec 31, 23	Jul 31, 24
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	12,072.69	11,147.87
Deposit, Certificate of	16,000.89	46,843.69
Library Telescope Escrow	1,964.87	844.18
PayPal	152.96	1,930.63
Savings - First Bank	43,138.18	13,139.18
SLAS Eclipse Conference Escr...	2,580.32	2,580.32
Total Checking/Savings	75,909.91	76,485.87
Other Current Assets		
Inventory Asset	841.87	781.21
Undeposited Funds	75.00	25.00
Total Other Current Assets	916.87	806.21
Total Current Assets	76,826.78	77,292.08
Fixed Assets	9,137.44	7,199.14
TOTAL ASSETS	**85,964.22**	**84,491.22**
LIABILITIES & EQUITY		
Equity		
Opening Bal Equity	8,497.66	8,497.66
Retained Earnings	81,754.13	77,466.56
Net Income	(4,287.57)	(1,473.00)
Total Equity	85,964.22	84,491.22
TOTAL LIABILITIES & EQUITY	**85,964.22**	**84,491.22**

We could use articles for the newsletter. The following topics are fine for submission.

1. Star party reports. Let us know how a star party you attended went! Photos would be most welcome in addition to the article.

2. Observing reports. Actually made it out observing? Let us know how it went. Taken some astrophotos? Please submit!

3. Bought something or built something? How about a review or an article!

Send an editable document or images to newsletter@slasonline.org
Please provide captions if sending images.

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 9/5, 10/3, 11/7, 12/5

SLAS Dark Sky Observing Dates All dates on Saturdays 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 9/11, 10/9

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

Stargazing at the Arch Events for the public held at the Gateway Arch 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 See you in August, 2024

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

August

13 Tue	Kids Time Jefferson County Library-Arnold
16 Fri	SLAS Regular Meeting
17 Sat	Aim For the Stars JCO
18 Sun	SLSC Solar Sunday
22 Thur	SLAS New Member Zoom
23 Fri	SLCL After Hours Family Campout
25 Sun	SLSC Solar Sunday
31 Sat	SLAS Dark Sky Observing at Danville

September

1 Sun	SLSC Solar Sunday
5 Thur	SLAS Board Meeting
6 Fri	SLSC First Friday
10 Tue	Lewis and Clark Library
11 Wed	Jamestown Bluffs Library
11 Wed	Francis Park
12 Thur	Stacy Park
13 Fri	Stargazing at the Gateway Arch
13 Fri	Crestwood Park
14 Sat	Dobsonfest
14 Sat	Tower Grove
20 Fri	SLAS Regular Meeting
21 Sat	Aim for the Stars JCO
25 Wed	Manchester Parks—Fussner field
26 Thur	SLAS New Member Zoom
28 Sat	SLAS Dark Sky at Danville
28 Sat	Camp Tuckaho

October

3 Thur	SLAS Board Meeting
4 Fri	SLSC First Friday
5 Sat	SLAS Dark Sky at Danville
9 Wed	Francis Park
9 Wed	Samuel Sachs Library
10 Thur	Eureka Hills
10 Thur	Stacy Park
10 Thur	Foley Park
11 Fri	Larson Park
12 Sat	Tower Grove Park
18 Fri	Stargazing at the Arch
18 Fri	SLAS Regular Meeting
19 Sat	Aim For the Stars and JCO
24 Thur	SLAS New Member Zoom
25 Fri	DarkSky Missouri Festival
26 Sat	SLAS Dark Sky Observing

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 $_____

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)***
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Hospitality ***Dennis Latinette*** 636-244-2867
hospitality at slasonline.org

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board25 at slasonline.org

Larry Campbell 636-244-2867
Board26 at slasonline.org

Brent Buch 314-239-0329
board27 at slasonline.org

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

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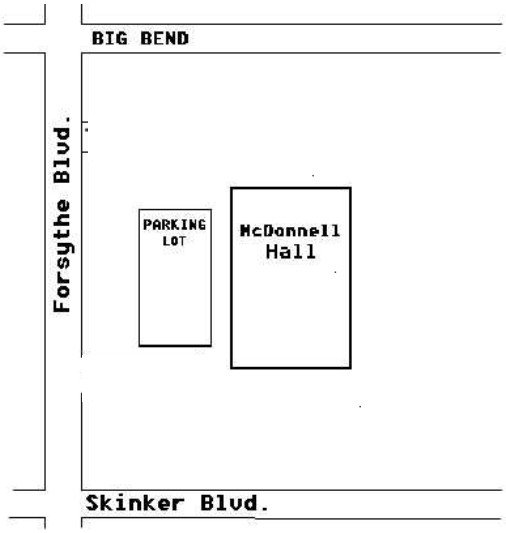
Devoted to the Interest and Advancement of the Science of Astronomy

ST. LOUIS ASTRONOMICAL SOCIETY

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

Follow us on
Twitter: @stlastro
Facebook: @stlastro

Founded 1936



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 any-one 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