THE EVENT HORIZON

ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

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NASA's Juno Mission To Jupiter

by

Dr. Fran Bagenal
University of Colorado, Boulder

Dr. Fran Bagenal of the University of Colorado, Boulder, will be featured at the April meeting of the Saint Louis Astronomical Society.

Juno's goal is to understand the origin and evolution of Jupiter. Underneath its dense cloud cover, Jupiter safeguards secrets to the fundamental processes and conditions that governed our solar system during its formation. Jupiter can also provide insights into the planetary systems being discovered around other stars. With its suite of science instruments, Juno is investigating the interior structure, mapping Jupiter's intense magnetic field, measuring the distribution of water and ammonia in the deep atmosphere, and exploring the mysterious Great Red Spot. The spacecraft has also made flybys of the Galilean moons Ganymede, Europa and Callisto. A huge bonus is the small public outreach camera that is taking fantastic images of Jupiter's beautiful clouds. The images – some science, some art – are processed and available to the public worldwide. JUNO was launched in August 2011 and has been in orbit since July 4, 2016.

Dr. Fran Bagenal is a research scientist and professor at the University of Colorado and is co-investigator and team leader of the plasma investigations on NASA's New Horizons mission to Pluto and the Juno mission to Jupiter. Her main area of expertise is the study of charged particles trapped in planetary magnetic fields and the interaction of plasmas with the atmospheres of planetary objects, particularly in the outer solar system. She has participated in several of NASA's planetary exploration missions, including Voyager 1 and 2, Galileo, Deep Space 1, New Horizons and Juno.

Upcoming meetings:
May: Gautham Narayan, PhD "4 Meter Telescope in Chile"; Univ of Illinois
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
October Pamela Gay, PhD, "Secret Squirrel Stuff", Planetary Science Institute
November: Robert Zubrin, PhD. "The Case for Mars"; The Mars Society
December K Michael Malolepszy "Probing the Sub-Microwave Universe, Part III SLAS Member

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April 19th Meeting will be In Person and Online!
The speaker will be virtual

The meeting will begin at 7:30 PM Friday, April 19 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**

If you didn't pick up your NSN Outreach Pin at the meeting in March, you can do so at the April meeting.

MSRAL is coming

So are elections (next month)
Be thinking about nominations at the meeting tonight!

President's Corner
by Jim Small

WOW! I have to say, the total solar eclipse April 8, 2024 was fantastic! I also have to pat myself on the back for the no brainer way my sister and I worked it out. It really helps when you have a friend who lives in Jackson, MO, right on the centerline! Soooo, a few months ago, I set it up so we could come to Gregs house the night before the eclipse! Perfect! We arrived a little after 4 pm NO TRAFFIC! Greg took us to Cape Girardeau for dinner at Watami Sushi and Hibatchi Steakhouse. (**https://www.watamisushimo.com/**) It was fabulous. After dinner, I organized equipment and generally got things ready for the eclipse.

Because we went down the night before, eclipse day was very relaxed. Leisurely breakfast then set up camera equipment. More on that next month. Enjoyed the eclipse with a nice lunch between shots during the partial and generally enjoyed the 4+ minutes of chaos during totality! Only a couple of glitches and nothing to keep me from getting some good shots. We'll see how they turned out for next month!

If you got some good eclipse shots, bring them to the meeting and we'll do a little show and tell after our fantastic speaker.

The speaker this month has been on national programs and should present us with a terrific talk! Be sure to join us if you can.

Registration for MSRAL (June 7-9) is open. Register before May 1 for the early bird price. Registration goes up by $10 beginning May 1. Here is the direct link:
https://msral2024.org/

You can also access the link from the MSRAL home page at msral.org. It is being held in Omaha, NE this year. Hope to see you there!

ALCON is also close by this summer and will be hosted by the Kansas City group. July 17-20. Registration is open. The link may be found on the home page at **https://www.astroleague.org/**
here is the direct link: **https://www.tickettailor.com/events/astronomicalsocietyofkansascity/1187693#**

It's HERE!! The annual RASC GA (Royal Astronomical Society of Canada General Assembly) conference will be May 4 and 5. It has to be the BEST deal for a conference EVER! This year, the tickets are only $20 for non-RASC members! Here is a link to the home page: **https://rascga2024.ca/** Registration isn't open yet but will be soon… Can't wait! Linda Shore is listed as one of the speakers…

The other great deal if you want to be on the cutting edge is the AAS summer meeting. If you join the AAS at the amateur rate ($54/year) you can attend their virtual conference for $104! It runs from June 9-13 and will have TONS of speakers (100+) I plan on attending… I always hear some GREAT talks on any subject! AND it's only $4 more than ALCON. Maybe I'll see you there….

For next months newsletter, I'll be looking forward to stories about your eclipse travels and would love to show off your best photos. So feel free to submit them to me at

newsletter@slasonline.org

I'll be waiting for them to arrive!!

Clear skies and enjoy the planets while you can…. It's going to be a bit of a bleak summer for most of them…

Sincerely

Jim Small

SLAS Memberships Expiring in April

Ken	Hargrove
Dan	Howard
John W.	King
David	Maffitt
James	Malke
Alfred	Schovanez
Thomas	Vesely

SLAS Memberships Expiring in May

Kevin	Adkin
Leontine	Davidson
Charles&Atsuko	Jeffreys
Robert	Klein
Eric	Kovach
Don	Mason
Raymond	Mueller
Jay	Paige
Harshard	Parulekar
Elizabeth	Sabetta
Allan	Stewart
Alan	Trodus
Nathan	Vize

From the StarBQ Quiz: Telescope Math

5-1. A 10" Celestron Schmidt Cassegrain Telescope with a f/8 focal ratio has a focal length of (circle closest answer) (1 point):

8" 10" 80" 100" 108"

5-2. A 10" Dobsonian telescope with a 50" focal length, has a focal ratio of (circle closest answer) (1 point)

5 10 50 60 150

5-3. An eyepiece with a 10mm focal length is used with a telescope with a focal length of 2000mm. What is the magnification of the two together? (circle closest answer) (1 point):

10X 20X 200X 210X

5-4. A 4" telescope and an 8" telescope are both using 50X magnification. Which telescope can see fainter stars? (circle closest answer) (1 point)

4" 8" both see the same

5-5. A 4" telescope and an 8" telescope are both using 50X magnification. Which telescope will make the Moon look larger? (circle closest answer) (1 point)

4" 8" both see the same no way to tell

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Answer #5-1: 80"

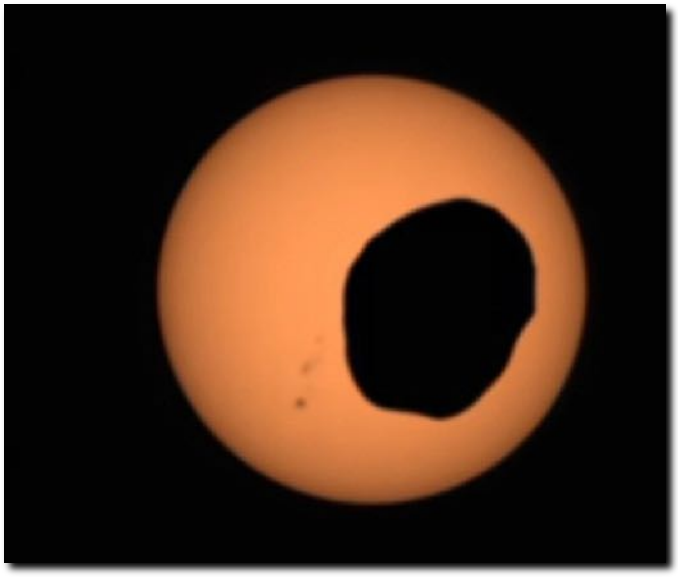
Answer #5-2: f/5

Answer #5-3: 200X

Answer #5-4: 8"

Answer #5-5: both see the same

NASA's Perseverance Rover Sees Solar Eclipse on Mars



NASA's Perseverance Mars rover used its Mastcam-Z camera system to shoot video of Phobos, one of Mars' two moons, eclipsing the Sun. It's the most zoomed-in, highest frame-rate observation of a Phobos solar eclipse ever taken from the Martian surface. Several Mars rovers have observed Phobos crossing in front of the Sun over the past 18 years. Spirit and Opportunity made the first observations back in 2004; Curiosity in 2019 was the first to record video of the event. Each time these eclipses are observed, they allow scientists to measure subtle shifts in Phobos' orbit over time. The moon's tidal forces pull on the deep interior of the Red Planet, as well as its crust and mantle; studying how much Phobos shifts over time reveals something about how resistant the crust and mantle are, and thus what kinds of materials they're made of. The Mars 2020 Perseverance mission is part of NASA's Moon to Mars exploration approach, which includes Artemis missions to the Moon that will help prepare for human exploration of the Red Planet. Credit: NASA/JPL-Caltech/ASU/ MSSS/SSI

Watch the awesome video here.
https://www.youtube.com/watch?v=aKK7vS2CHC8

Solar Eclipse Ellington MO

***by* Andy Walker**

Date: Thu, 11 Apr 2024

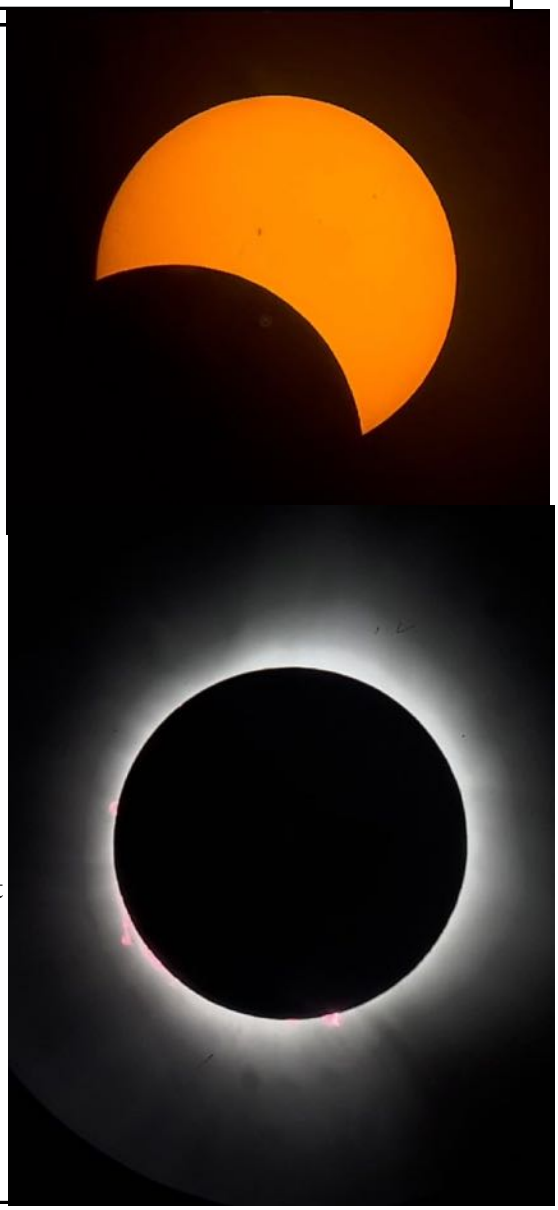
Vickie and I stayed at the Scenic Rivers Motel Sunday and Monday night for a mini-vacation. The trip was uneventful and took about two and a half hours. For those of you that enjoy twisty roads there is a section of Highway N that forks off 51 just west of Pilot Knob and runs south to 72 that's a real treat. I would not make that trip at night. Nevertheless, the accommodations were pleasant as were the town folk anticipating clear skies for the show. Fortunately, the weather was splendid and we set-up in a nicely maintained grass filed next to the motel and were joined by a number of people, many from out of town as well as the motel proprietor and staff.

Don and Donna Ficken
MIke Gratiot with Jacob and Allison
Tom and Lora Schloemann
Jim and Ann Trull
Eddie and Lynn Agha
Shirley Martin
Louise Crane from Kensington MD and Alfreda Meyer form Arlington VA
Mike and Ester Wagner
Steve and Denise Humnicutt
Tom Vincent and Karen Hollering
Terry Clinkingbeard and family
Ben Hawkins and family
Heather Burm
Keith and Mandy Browning
Bethany Abood
A mother and son from Rolla

Obviously for those of you that know my prowess at astrophotography can understand why I have on photographs of the eclipsed Sun. Rather than sharing any attempt to photograph that, I have opted to show a montage of photographs from a Sunspotter that Don set-up. This was a crowd pleaser. I must say. It's easy to use and understand and for the purpose of finding sun spots or tracking the eclipse, it was a great tool.

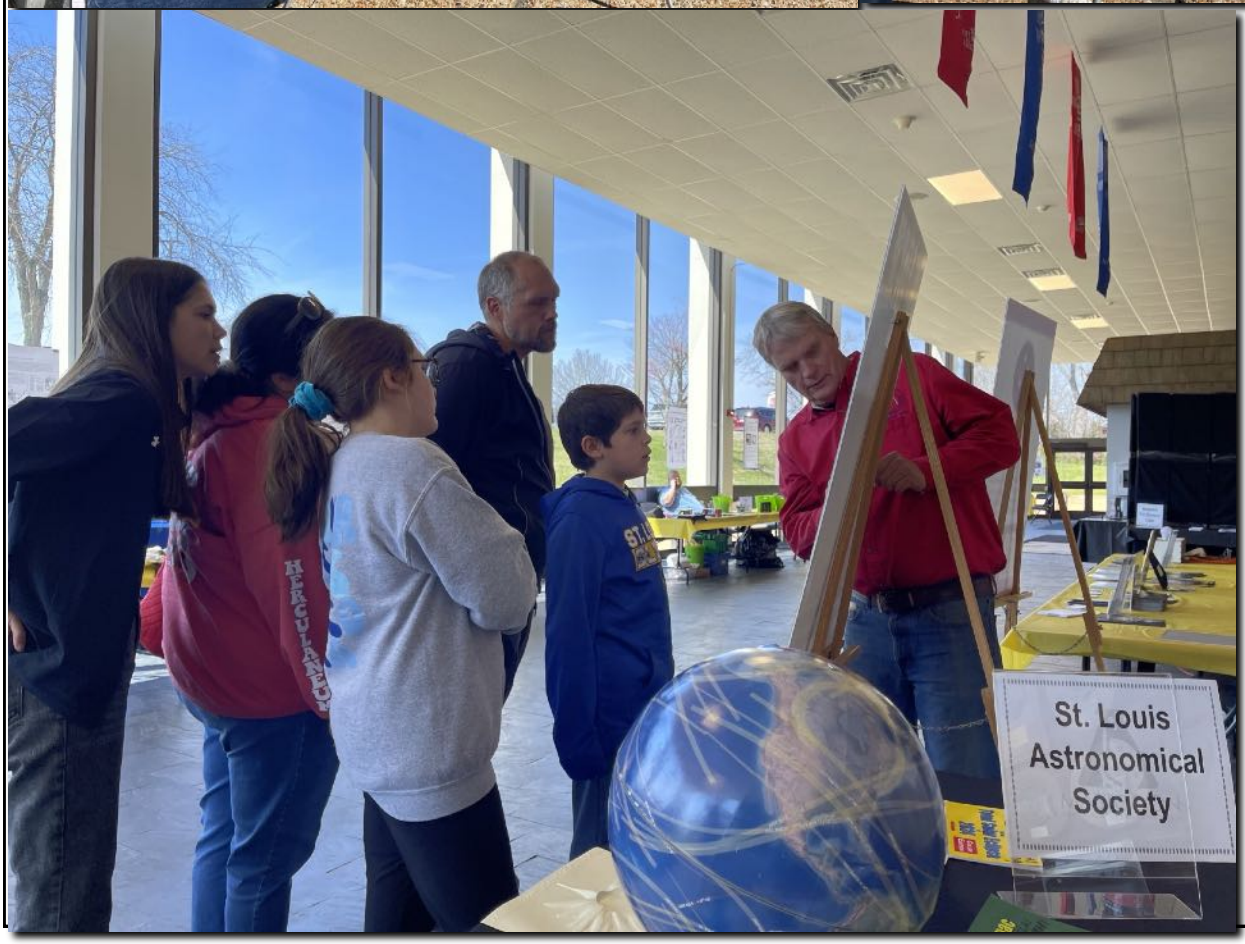
I adjusted the Sunspotter every 10 to 15 minutes, which worked out nicely. Once the eclipse started I focused on spectacle before us with only one quick photograph using my phone on automatic. The photograph does provide one important observation for observers like myself. Notice the high cirrus clouds. Those were not as prominent prior to the eclipse. Perhaps these are a result of cooling or just thin enough not to notice and a reason why so many clear nights end up in disappointment when looking for faint fuzzies in the sky.

An amazing sight for sure.



The Eclipse from Cape Girardeau

We had more then 20 SLAS members join us at the Marcus West Cape Cinema parking lot on April 8th. The site is located on west side of I-55 in Cape Girardeau, MO. In total, we had around a 100 people at the site. Photos from our eclipse site in Cape Girardeau.



Above Left:

Don Ficken helps with a telescope at a Gateway Arch event.

Above Right:

Putting the telescope to use!

Left:

Bill Biermann explains the eclipse path to visitors at the Mastadon Science Fair held at Jefferson College. The event was a mix of science as well as art. 100—200 people attended the event.

Above: Cook Feldman, Above Right: Randy Harrison, Right: Dennis Letinette All three were spending a Sunday afternoon in March at the St. Louis Science Center Solar Sunday event. These events were held every Sunday leading up to the eclipse and will be held this summer from Memorial Day to Labor Day.

Cook is using his PST hydrogen alpha telescope which provides a great view of the solar surface including prominances, etc.

Randy is using a binoc ular telescope equipped with white light solar filters. Dennis is using a Newtonian reflector on a Dobsonian mount with a white light solar filter.

Below: Bill Biermann and Jim Small man the booth at Jeffeson College for the Mastadon Science Fair.

St. Louis Astronomical Society
Devoted to the Interest and Advancement of the Science of Astronomy
Executive Board Meeting Minutes 3/7/2024

1. Opening Activities a. Attendance: Jim Small, Larry Campbell, Dennis Latinette, Randy Harrison, Mark Jones, Brad Waller, Bill Winningham, Brent Buch, Bill Biermann, Dennis Meyer, Jamil Jackson b. Open Meeting: 7:03pm c. Approval of last month's minutes. Motion to approve by Randy second by Dennis. Minutes approved for Feb. d. Next Board meeting date (on approval of board): 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 Around 50 visitors for First Friday. Outside and table inside. Randy printed of flyers for upcoming events. Add LTP brochures to table. Action: Get LTP brochures to SLSC. Dennis to contact Don Ficken about getting LTP brochures or business cards. Action: Randy and Brad to add SLSC events to NSN calendar. Report: Solar Sunday events have to NSN calendar for March, Randy will add the April thru September events. Brad has added FF dated thru 2024 and 2025 First Friday – Feb 2, Mar 1, Apr 5, None in May, June 7. Events for July-Dec still being finalized Solar Sunday – 3/10, 3/17, 3/24, 3/31, 4/7, restart 6/2, 6/9, 6/16, 6/23, 6/30, 7/7, 7/14, 7,21, 7/28, 8/4, 8/11, 8/18, 8/25, 9/1

2. Upcoming General Membership meeting topics: a. Speaker: In-Person Guest speaker: Tom Rathjen, "The Moon and Beyond", NASA b. Schedule room at Wash U.? Yes c. Who is recording meeting? Brent d. Special Awards needed: NSN Volunteers Pins will be awarded e. Speaker Press Release and social media: has been released. f. Special Business – Equinox prizes (online and in-person), Upcoming nominations. g. A101 – Jim Small to talk about the eclipse, toolkit, FAQ, apps Brent – screenshot of Zoom attendees in word, verified member in NSN, then assigned number to each person f. Hospitality: a. Budget – 2024 Budget $360, balance $360 Larry does not plan to run for re-election in May Action: Larry to buy large plates and forks

3. SLAS Financial Report 2023 books were closed before January newsletter. Final report for 2023 was in January 2024 newsletter a. Balance Sheet: Balance sheet: assets $78,085; Total assets: $85,837, Interest on CD ($46K) is $120/month b. Profit/Loss report: As of end of Jan. Net Income -$137; c. Annual Budget meetings: start in September d. Corporate filings: 2024 Budget: $20, paid in even years only, not due until August 2024 e. Insurance; 2024 Budget $1165, due May 1st f. Astro League Dues: 2024 Budget: $1070, due around July

4. Speaker Committee If you are working on a Presenter, please keep Brad informed. Budget – 2024 Budget $600, Balance $600 We will have hotel fees for March and April
b. Upcoming speakers: SLAS Monthly Meeting Presentations 2024

Month	Name	Topic	Sponsor
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 Astronomy	Univ of Oklahoma
19-Jul-2024	Davies, Ashley G PhD	Juno, Close Flybys of Io	JPL
16-Aug-2024	Bradley Tsalyuk	Samuel Oschin Air and Space Center, California Science Center	
20-Sep-2024	Open		
18-Oct-2024	Pamela Gay, PhD*	Super Secret Squirrel Stuff (S^4)	Planetary Science Institute
15-Nov-2024	Robert Zubrin	The Case for Mars	Mars Society
20-Dec-2024	K Michael Malolepszy	Probing the Sub-Microwave Universe, Part III	SLAS Member
17-Jan-2025	Bhupal Dev, PhD	Finding New Physics in Debris from Colliding Neutron Stars	Wash U

*Possible Live Speaker (Speaker budget may be used to pay for hotel room for speaker) d. Topics of interest - Mark sent Brad email to possible speakers from UMSL, U of Illinois and U of MO Columbia e. Stipends f. Travel 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. No response: close action

5. Membership Initiatives a. Budget – 2024 Budget $600, Balance $600 Welcome Aboard Meetings – These have been replaced the following standing action. $100 for attendance prizes will be billed in Feb report. 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.c. Raffles – not planned d. Attendance prizes – In-person and virtual members will be eligible for attendance prizes in 2024, next prizes in March 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 2024 Budget $500, Balance $500 b. NSN Outreach Awards: Awards planned for February meeting had to be postponed until March due to weather. Action: Brad to print NSN certificates and bring to meeting. Action completed and certificates have been given to Jim Small to bring to March meeting. Close action Action: Jim to submit NSN pins for reimbursement c. Membership Report: From Don Ficken: We have 218 members which is a net loss of seven members from the start of this year and a loss of 24 members compared to this same time last year. The most notable loss was individual memberships which are down 16% from last year. d. Member anniversary – Next event is November meeting, 2023 pins are still in store room
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 Sept 1st 3. Nomination reviews: by October 1st 4. Award selection: selections made in November 5. Awards presented at December meeting – Report from Bill Biermann - Awards Committee survey was conducted, to Identify new and existing items of concern. Various opinions were rendered, along with some hypothesis of root cause, along with some preliminary analysis. 6 out of 10 committee members responded. Wednesday March 13th for the first meeting, at 6pm. The second meeting will be in June, TBD. Action: Bill Biermann to create March 13 meeting for Special Awards Committee in NSN calendar

7. Outreach - a. Budget – 2024 Budget $500, Balance $500 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: Expecting new tablecloths to be posted March financial report Action: Jim Small to create artwork for tablecloths. Action: Jim Small to order 2 more of the printed SLAS tablecloths for outreach events. Report: I submitted the order for two table covers for a total of $250.10, it will also include a free 30x60 banner. e. Upcoming outreach events: Gateway Arch - March 23, 2024 (Saturday), May 11, 2024 (Saturday), June 14, 2024 (Friday), July 12, 2024 (Friday), August 10, 2024 (Friday), September 13,

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 First Friday – Feb 2, Mar 1, Apr 5, None in May, June 7. Events for July-Dec still being finalized Solar Sunday – 3/10, 3/17, 3/24, 3/31, 4/7, restart 6/2, 6/9, 6/16, 6/23, 6/30, 7/7, 7/14, 7,21, 7/28, 8/4, 8/11, 8/18, 8/25, 9/1 Note – Planetarium parking lot should be open for all events after Mar 10th. Action: Randy to add Dobsonfest to NSN calendar and solicit volunteers f. Awards/recognitions – g. NSN Outreach hours: Total Hours Reported in NSN: 82.5 in 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: Bill Biermann to create final call list and assign to each NSN coordinator. b. 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 will talk to his tax adviser but not until May Board Meeting.

9. New Business

10. Other Committee Reports: If needed

A. SLSC Business: a. First Friday actions – see above b. Other immediate business
B. SLCL Business a. Annual contract – No contract yet for 2024. b. Upcoming events –
C. Jefferson College Business: a. Committee Meeting report: Dome has been scrubbed clean by JC staff, it looks very good. John Duchek has complete Observatory Operator Training and has been given keys to the observatory. Action: Mark to complete repair of 12.5" Dob and setup at JCO. Repair done and ready to test at Mark's house before moving telescope to JCO. Report: telescope has been delivered to JCO and is now in the storage shed. Due to its large size, it is NOT assembled and ready to use. Also step ladder purchased for telescope has been delivered to JCO. This ladder can be used with multiple telescopes. b. Upcoming Outreach Event: JCO –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. Report: RA encoder has now been ordered, $85. Mark Submitted expense report for reimbursement. Action can be closed
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 – c. Maintenance budget – none requested d. Mileage re-imbursement – see above e. Promotional materials - none requested
E. SLAS Social Events a. Budget – 2024 Budget $390, Balance $ 390 b. Homemade Fest - 2024 Budget $150. Balance $ c. Star-B-Q – 2024 Budget, $240, Balance $ 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 2023 $600, Balance $373 Budget 2024 $600, Balance $ b. Quarter cards – Action: Brad to create new artwork for Quarter Card. Report: Artwork sent to Inkspot. Artwork contains 5 images provided by Randy Harrison. Will ask Inkspot to print 100 of each for a total of 500 cards.
G. Loaner scope Program a. Budget – 2024 Budget $100, Balance $ b. New donations: None. Expecting a C-8 donation next week c. Replacement Parts for the LTPs - d. Items for sale several: The following SLAS items have been sold. These were items donated to SLAS in 2023 and 2024. The items were sold on Facebook Market Place. I have the $320 from the sales and will give to either Bill Winnngham or Don Ficken for deposit.
1. SOLD Meade's 628 - 6" f/8 Newtonian Reflector on StarFinder EQ Mount. 1 ¼" focuser, 6x30mm Finder, 20mm Eyepiece. Missing Magellan I controller and 12VDC power Cord, asking $100
2. SOLD 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; $100.
3. SOLD 1980's Coulter Odyssey 8" Dobsonian Telescope, 1-1/4" focuser. No finder or eyepieces included. Selling price on Astromart $225, asking $120
H. SLAS Library a. Budget – 2024 Budget $200, balance $ Other – 2024 TSE. How do we want to prepare for the 2024 Eclipse? Add FAQ to website? Pick a SLAS location to observe? Mark has coordinated with Walmart Superstore in Jackson MO. We can use space in SW corner of parking lot 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 11 Sunspotter Telescopes to loan to schools and other organizations for the TSE. 4 Sunspotters have been loaned to Rockwood School District until after the eclipse. 1 Sunspotter loaned to Rich Fefferman for Arch events. 1 Sunspotter loaned to Bill Breeden for Francis Park events. A101 for February and March Twitch Presentation on the eclipse, maybe several Eclipse glasses – we have about $1200 in sales of glasses and we have about 5000 glasses unallocated The American Astronomical Society made a 26-minute documentary film "The Path to the Path" with some people that have been involved in the Eclipse Task Force Group. Don Ficken was interviewed. https://thepathtothepath.org/
I. Merchandise 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 2024 $600, Balance $
L. Website - a. Budget 2024 $750, Balance $
M. Social 76 members of Private FB page 3134 followers on Public FB
N. Night Sky Network
O. SLASdialogs (part of Website Budget) SLAS Groups.io – 133 members Annual $110 account fee is coming due Jan 8th 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:

11. Closing Activities:

Bob Kirschenmann, of Etlah, Missouri, an extraordinary machinist/astronomer passed away on Feb 20, 2024 from a glioblastoma multiforme at age 81. Bob was also a former SLAS member and officer. Vice-President 1989-1991, Board member 1992-1994, and Newsletter Editor 1992-93. Bob was a very good telescope maker and was one the SLAS members tutored by John Dobson, when John visited STL in 1990.

Motion to adjourn the meeting by Brad and by Larry, meeting adjourned 9:22pm

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

	Jan - Mar 24	Budget	$ Over Bud...
Ordinary Income/Expense			
Income			
Events Income	520.00	250.00	270.00
Magazine Subscription	1,269.75	759.45	510.30
Membership Dues	1,655.00	1,235.00	420.00
Total Income	3,444.75	2,244.45	1,200.30
Cost of Goods Sold			
Magazine Subscriptions	892.94	759.45	133.49
Total COGS	892.94	759.45	133.49
Gross Profit	2,551.81	1,485.00	1,066.81
Expense			
1-Programs & Events	605.00	1,290.00	(685.00)
2-Newsletter	317.48	150.00	167.48
3-Library expense		50.00	(50.00)
5-Loaner Scopes	11.84	25.00	(13.16)
6-Brochures	151.80	150.00	1.80
8-Website	343.47	400.00	(56.53)
9-Administrative Expen...	874.24	960.70	(86.46)
Total Expense	2,303.83	3,025.70	(721.87)
Net Ordinary Income	247.98	(1,540.70)	1,788.68
Other Income/Expense			
Other Income			
Donations	550.00		550.00
Interest Income	264.16	15.00	249.16
LTP Receipts	30.00		30.00
Total Other Income	844.16	15.00	829.16
Other Expense			
LTP Disbursements	158.20		158.20
Total Other Expense	158.20		158.20
Net Other Income	685.96	15.00	670.96
Net Income	**933.94**	**(1,525.70)**	**2,459.64**

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

	Dec 31, 23	Mar 31, 24
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	12,072.69	13,150.16
Deposit, Certificate of	16,000.89	46,264.50
Library Telescope Escrow	1,964.87	1,836.67
PayPal	152.96	259.83
Savings - First Bank	43,138.18	13,138.73
SLAS Eclipse Conference Escr...	2,580.32	2,580.32
Total Checking/Savings	75,909.91	77,230.21
Other Current Assets		
Inventory Asset	841.87	781.21
Undeposited Funds	75.00	580.00
Total Other Current Assets	916.87	1,361.21
Total Current Assets	76,826.78	78,591.42
Fixed Assets		
Accum Depr - Office Equp	(216.65)	(216.65)
JC Scope and Observatory	9,137.44	8,306.74
Office Equipment	216.65	216.65
Total Fixed Assets	9,137.44	8,306.74
TOTAL ASSETS	**85,964.22**	**86,898.16**
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)	933.94
Total Equity	85,964.22	86,898.16
TOTAL LIABILITIES & EQUITY	**85,964.22**	**86,898.16**

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 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 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 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. 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 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: 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

	April
20 Sat	Aim for the Stars at JCO
25 Thur	SLAS New Member Zoom
	May
2 Thur	SLAS Board Meeting
4 Sat	SLAS Dark Sky at Danville
11 Sat	Stargazing at the Arch
15 Wed	Francis Park
16 Thur	Stacy Park
17 Fri	Crestwood Park
17 Fri	SLAS Regular Meeting
18 Sat	Tower Grove Stargazing
18 Sat	Aim For the Stars at JCO
23 Thur	SLAS New Member Zoom
	June
1 Sat	SLAS Dark Sky at Danville
2 Sun	SLSC Solar PTV
6 Thur	SLAS Board Meeting
6 Thur	UMSL STEM
7-9	MSRAL 2024
7 Fri	First Friday SLSC PTV
8 Sat	St Louis Air Show
9 Sun	St Louis Air Show
9 Sun	SLSC Solar Sunday
12 Wed	Francis Park
13 Thur	Stacy Park
14 Fri	Stargazing at the Arch
15 Sat	Tower Grove Stargazing
15 Sat	Aim For the Stars at JCO
16 Sun	SLSC Solar Sunday PTV
21 Fri	SLAS Regular Meeting
22 Sat	Backyard Campout in Des Peres Park
23 Sun	SLSC Solar Sunday PTV
27 Thur	SLAS New Member Zoom
	July
6 Sat	SLAS Dark Sky at Danville
7 Sun	SLSC Solar Sunday
10 Wed	Francis Park
11 Thur	SLAS Board Meeting
12 Fri	Stargazing at the Arch
13 Sat	Tower Grove Stargazing
14 Sun	SLSC Solar Sunday
19 Fri	SLAS Regular Meeting
20 Sat	Aim for the Stars at JCO
21 Sun	SLSC Solar Sunday
25 Thur	SLAS New Member Zoom
28 Sun	SLSC Solar Sunday
30 Tue	Camp Emeth Late Night

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

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dialogsmoderator at yahoo.com

Star Party Coordinator ***Bill Breeden*** 314-276-3613
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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

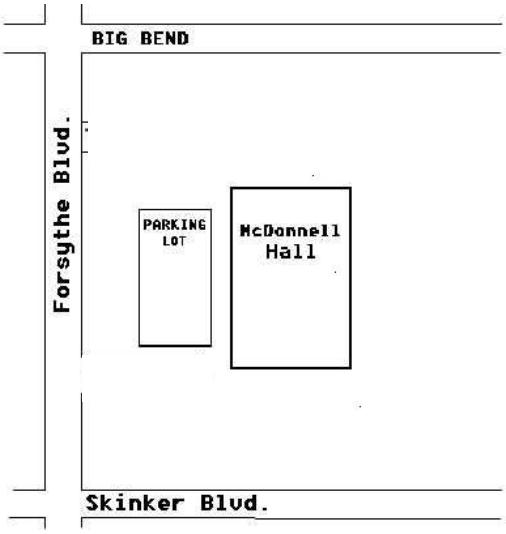
Follow us on
Twitter: @stlastro
Facebook: @stlastro

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 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
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