THE EVENT HORIZON

ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

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Celestial Fast Radio Wave Bursts – Who, What, How?

by

Dr. Jonathan Katz
Department of Physics
Washington University

Dr. Jonathan Katz of the Department of Physics, Washington University will be featured at the April meeting of the Saint Louis Astronomical Society. The meeting will begin at 7:30 PM Friday, April 21 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. For the Zoom link, see the article below!. The event, cosponsored by NASA's Missouri Space Grant Consortium, is open to the public free of charge.

Fast radio bursts are powerful blasts of radio waves, lasting only a small fraction of a second. They are now known to be incredibly distant – millions of light years beyond our Milky Way galaxy. Some sources repeat bursts; others do not. Their origins are not yet known, but some possibilities involve supermassive black holes or colliding neutron stars. Dr. Katz will talk about the nature of the bursts, where they are located, and theories about how such powerful blasts can be generated. He will also talk about some of the huge radio telescopes, which detect radio waves rather than light waves, that are used to study them.

Dr. Jonathan Katz is a Professor of Physics and a Faculty Fellow of the McDonnell Center for the Space Sciences at Washington University. His research areas include astrophysics, "soft matter", climate, and applied physics. One of his current research projects is the study of Fast Radio Bursts.

Upcoming Meetings
May William McKinnon Missions to Jupiter's Moons Wash U.

April Meeting will be In Person and Zoom
Nominations for Elections in May

The SLAS meeting for April will be in-person and via Zoom. The Zoom room will be open from 7-10 pm. Meeting starts at 7:30 pm. We will be accepting nominations after the meeting for elections in May. Thus far, nominations include: Jim Small, President, Bradley Waller, Vice President, Mark Jones, Secretary, Bill Winningham, Treasurer, Larry Campbell, Hospitality and Deniis Latinette, Board Member at Large

To join Zoom Meeting for SLAS Regular Meeting with computer or smartphone: Just click the link: https://zoom.us/j/8604505790 Meeting ID: 860 450 5790

MSRAL 2023 Registration is Live!

Registration for the 2023 MSRAL Convention hosted by the Astronomy Club of Tulsa is now open. Dates for the event are June 9-11. StarBQ Friday night, meetings all day Saturday with Banquet Saturday night, and final meetings Sunday morning. Meeting concludes at Noon Sunday.
Link for all information and registration is **https://www.msral2023.org/**

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President's Corner
by Jim Small

It's been a BUSY month! There are a lot of things going on, so let me remind you here:
- Meeting Friday night
- Nominations for board open
- MSRAL registration is live
- Info for AOY past recipients planning on attending MSRAL
-Info about RASC GA virtual conference
- Info about MSRAL Bylaws vote
- MSRAL conference upcoming in June
- AAS conference upcoming in June
- LOTS of star parties, esp during 1at quarter Moon!

Ok, so much for the checklist. There is a lot going on! The JWST is producing some terrific images and pulling us into some uncharted territory. Space X launched the worlds largest rocket which was fantastic until the "rapid unscheduled disassembly". The SLAS calendar of speakers is looking bleak at the moment, but I anticipate another years worth of terrific talks after I attend the RASC GA and AAS virtual meetings. Can't wait for those. The RASC conference is the BEST deal for talks EVER. It's $10 cheaper than MSRAL and all the talks for 3 solid days are terrific. Looking forward to the meeting Friday night as we actually get a speaker from Wash U Live in the room! Should be great! It's been a while…

With all this going on, I certainly hope you've had the chance to get out and do some observing during this season where Orion dominates the southern skies and we also have the planet show! Have you seen Mercury yet? Get your cameras and phones out. Say, that might make a good Astro 101. Would you be interested in learning how to use your phone for astrophotography?

See you at the meeting! jrs

RASC General Assembly Virtual Conference May 5-7

The Royal Astronomical Society of Canada (RASC) General Assembly Conference will take place in three PACKED days of talks, ALL VIRTUAL. Sit back in you most comfortable chair and enjoy this conference for just $40 for non-members. It was such a great deal last year and resulted in my recruiting all of the speakers (almost) last fall! So if you enjoy some great talks and would like to attend, here is the link: **https://rascga2023.ca/** One of the benefits of attending is you can view the talks for a couple of weeks or more after the conference in case your schedule doesn't allow you to see them all live! So… for all you armchair astronomers with a thirst for knowledge, here ya go!! See you there!

SLAS Memberships Expiring in April

Kumar	Challa
Brad	Crow
Lynn	Fee
Allex	Goh
Ken	Hargrove
Kenneth	Hirsch
John W.	King
Deborah	Lemar
James	Malke
Carl	McCullough
Alfred	Schovanez
Major Michael	Thompson
Eric	West

SLAS Memberships Expiring in May

Jeremy	Bast
John	Bush|
Leontine	Davidson
Charles & Atsuko	Jeffreys
Jill	Jones
Robert	Klein
Eric	Kovach
Don	Mason
Raymond E.	Mueller
Ben	Murray
Jay	Paige
kathy	Rosario
James R.	Small
Randall	Sommers
Yang	Weimin

AAS Conference June 4-8 Just Before MSRAL

If you like a good, informative meeting with information on the cutting edge, then consider the American Astronomical Society (AAS) meeting this June 4-8. The in-person meeting will be held in Albuquerque, NM, but you can attend any and all the meetings (except for some workshops most likely) virtually, saving a TON of money. I sent out a notice earlier today since 4/20 is the early registration deadline. The price goes up after today by about $18.

Since we are amateur astronomers, we can join the AAS at the nice rate of $53 rather than the $199 for full members. The virtual conference only costs us $153 instead of the over $500 price for full members as well. Well worth it considering what you get in return. For an idea, check out the schedule and list of plenary speakers at the links below. Remember, this is the conference where professionals go to exchange information so you can get a great jump on the latest in the field.

By the way, one of the benefits of membership is being able to view archived presentations from past meetings!

Perhaps I'll see you in one of the virtual rooms!

Here are the links:

As amateurs, you may join the AAS for $53 a year here: https://aas.org/join/classes-membership-and-affiliation

For the meeting, if you register today (last day for early registration... sorry for late notice... had distractions.... but it isn't much more after today) you can attend the virtual conference for $153 ($171 after today) https://aas.org/meetings/aas242/registration

Here is the schedule and plenary speaker info https://aas.org/meetings/aas242

Sincerely,

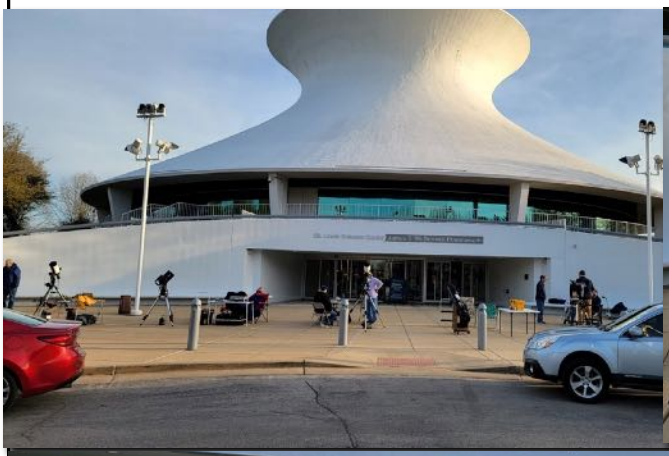
Jim Small

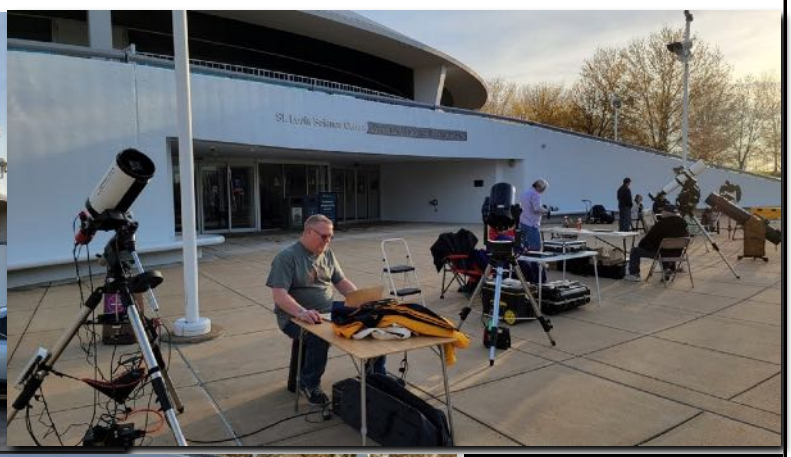
First Friday at the Science Center April 7, 2023 Report

***by* Bill Breeden**

Partly cloudy skies were not going to keep us from setting up our telescopes at the McDonnell Planetarium on Friday, April 7. As darkness fell, the sky cleared nicely. Rock-steady seeing gave us great views of the gibbous-phased Venus, and the small 6" disk of the Red Planet Mars. Visitors were fascinated with these two planets – Earth's two closest neighbors. Jupiter and Saturn usually steal the show, but they were not up tonight, leaving Venus and Mars to take the lead position. Venus never shows any surface detail due to its complete cloud cover. Mars, despite its small apparent size tonight, looked spectacular, with a polar cap and markings occasionally popping into view.

The Moon was one day past Full, and would not rise high enough to be seen above the trees in the east. So, Venus and Mars ruled the sky tonight. We had many parents and kids at our telescopes, and this was a great start to the 2023 astronomy season! Photos by the author.





Above Left: *Setting up telescopes in front of the McDonnell Planetarium, preparing to show visitors live views of Venus and Mars.*
Above Right: *SLAS member Chris Hanson setting up his gear for showing guests live views of the night sky.*

Left: *The author's LX-90 Schmidt-Cassegrain telescope pointed at Venus, waiting for dark!*

SLAS Special Awards Nominations for 2023 are Open

The annual SLAS Special Awards nominations are open for 2023. There are five awards to be presented as follows
The Albert M. Obrecht, Founders Award
The Lois D. Fitter Outreach Award
The Richard D. Schwartz Supportive Faculty Award
The Robert E. Cox Popular Astronomy Award
The Alfred L. Woods Mentoring Award

The Obrecht, Fitter and Woods awards must be SLAS members, the Schwartz and Cox awards are not restricted to SLAS. For the full form to nominate, including definitions of awards, see this link: **https://www.slasonline.org/files/award/SLASAwardNominationForm.doc** The deadline for nominations is Sep 1st The completed form should be attached to an email and sent to awards@slasonline.org with the subject line Award Nomination Form Submission. Committee members are Chairman – Larry Campbell, Sharon Bertram, Bill Biermann, Richard Heuermann, Mark Jones, Joe Marcus, Grant Martin, Fred Schovanez, Jim Small, and Bill Neubert

Calling All Past Amateur of the Year Recipients! *by* Jim Small

If you are a past recipient of the Amateur of the Year (AOY) award from MSRAL, AND you are planning on attending this year's MSRAL convention to be held in Tulsa, this article is for you!

As you most likely know, past AOY winners make up the committee to decide on this year's award at the convention. That decision is made over lunch on Saturday at the convention. The circumstances of this years meeting make it necessary for us to order lunch separately from the rest of the group so we don't have to wait in line for lunch and can proceed directly to the meeting. To that end, Peggy Walker is coordinating lunch for us. If you are planning to go to the meeting, please email Peggy at the address below to make sure you get the menu for lunch sent to you and can arrange for payment for your order. It would also help if you notified me about attending so I can keep you in the loop of any developments.

So if you are a past AOY recipient and plan on attending MSRAL, send an email as such to:

Peggy Walker
AOY past recipient lunch list
email: BASidewalkAstro@yahoo.com

For everyone else who are planning on attending MSRAL, please RSVP on Night Sky Network! I will send out a message from the network this week.

Sure hope to see you all at the conference!
Sincerely, Jim Small president@slasonline.org

MSRAL BYLAWS to be Voted on at MSRAL Business Meeting at Conference June 10, 2023

In meetings the last several months, a committee from the Mid-States Region worked hard to revise and update the MSRAL bylaws. The result of those meetings is the final draft of the bylaws to be voted upon at the MSRAL conference in June at the regular business meeting. The revised bylaws and the notes from the meetings that took place to make the revisions is posted on the SLAS website with a link on the home page.

The first two pages of the document are the notes from the meetings followed by the final draft of the revised bylaws There will not be time for further revision at the meeting and it will be presented for a vote.

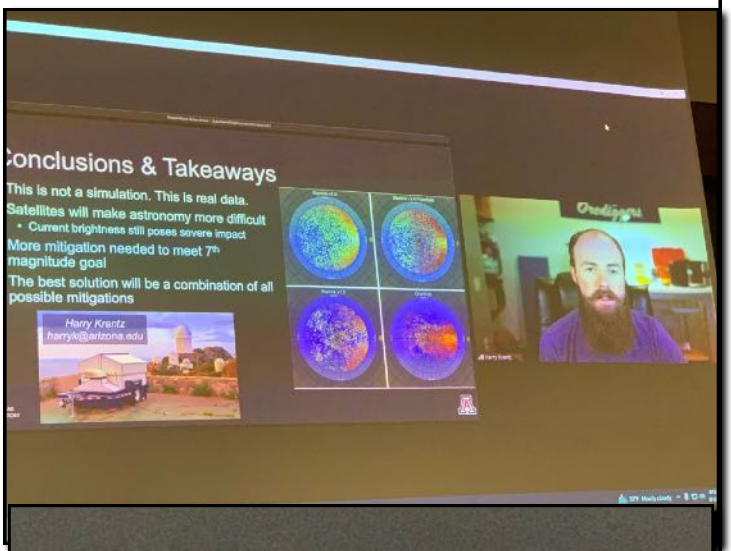
Here is the link for the document from the home page of SLAS: **https://www.slasonline.org/images/MSRAL/MSRAL_BYLAWS_final.pdf**

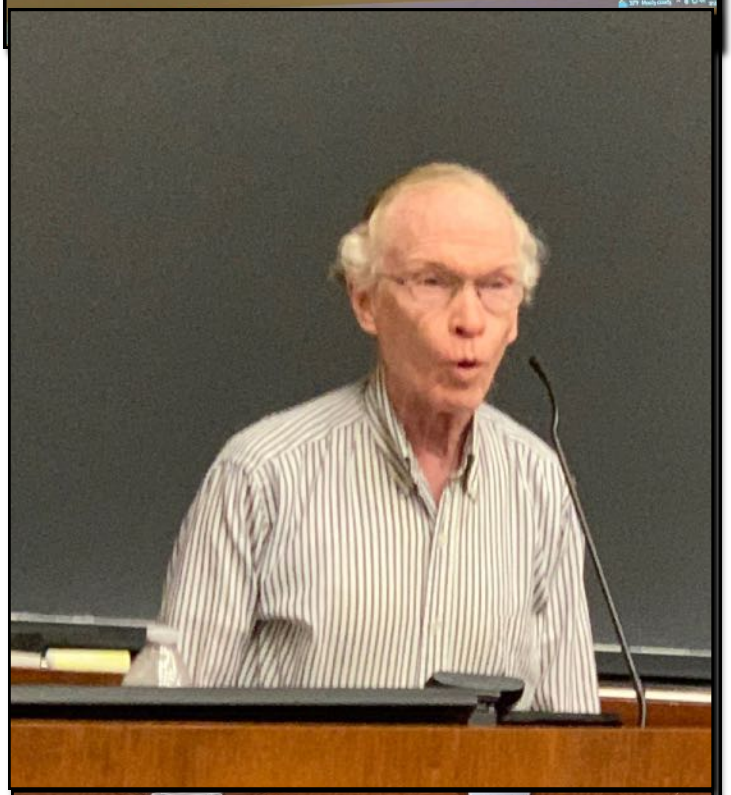
If you have questions about the process or its result, don't hesitate to ask myself or Cook Feldman about it.

Sincerely, Jim Small president@slasonline.org

March Meeting

Harry Krantz from Univ of Arizona gave a great talk about his observations of satellite constellation, like Starlink and their brightness as a function of viewing geometry. Harry has been working with Starlink and others in industry to establish goals for minimizing satellite brightness. We also had Equinox attendance prizes and Larry Meyer sang "Oh Danny Boy" for St Patrick's Day.





The New SLAS Mugs are HERE!

Our new SLAS coffee mugs have arrived. They will be available to purchase at our regular meetings at Washington U. Price: $10 each, 2 for $15

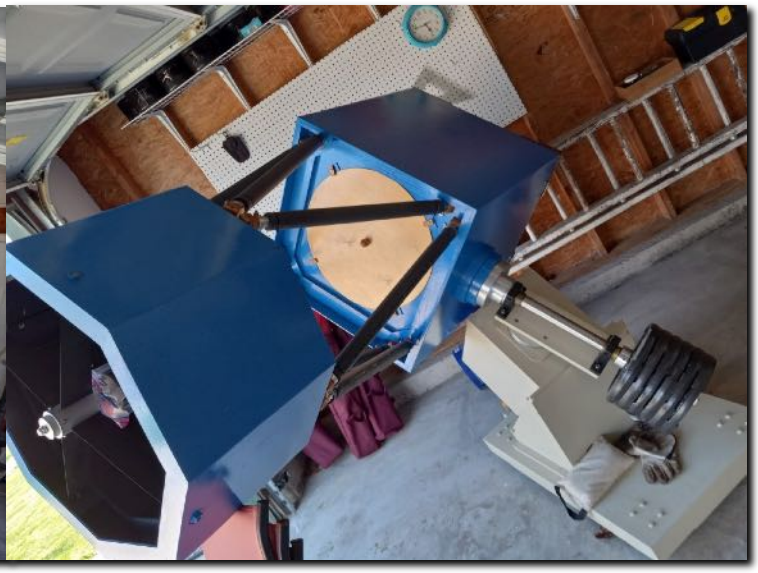
Above: Bill Bierman at a Library Telescope Program
Left: Display at Lasalle Springs
Below left: Jim Idoux shows the Sun through his Lunt Solar Scope
Below right: Dennis Latinette with his 6"Dob and binoculars

Top: Venus 4-9-2023. Venus closer tonight to the star cluster called the Pleiades (aka 7 Sisters or Subaru). Venus will appear to move closer to the Pleiades over the next few days. Here is a photo from tonight. Venus and Pleiades to lower right and on left side the larger cluster called the Hyades.

Above: 4-11-2023. Clear skies continue over STL tonight. Venus is now right beside the star cluster called the Pleiades (aka 7 Sisters or Subaru). Over the next few nights, Venus will continue to ascend , moving closer to the Hyades star cluster. Here is a photo from tonight, Venus and Pleiades to lower right and on left side the larger cluster called the Hyades. The second photo is a close-up of Venus and the Pleiades.

Left: Setting up at Jefferson College Observatory on a great spring night with Orion, the Hyades and the Pleiades showing up nicely in the dark skies.

Right: Don Ficken's setup at JCO. 13" Coulter and a Library Telescope. The Cpt James Moody dome is in the back-ground.



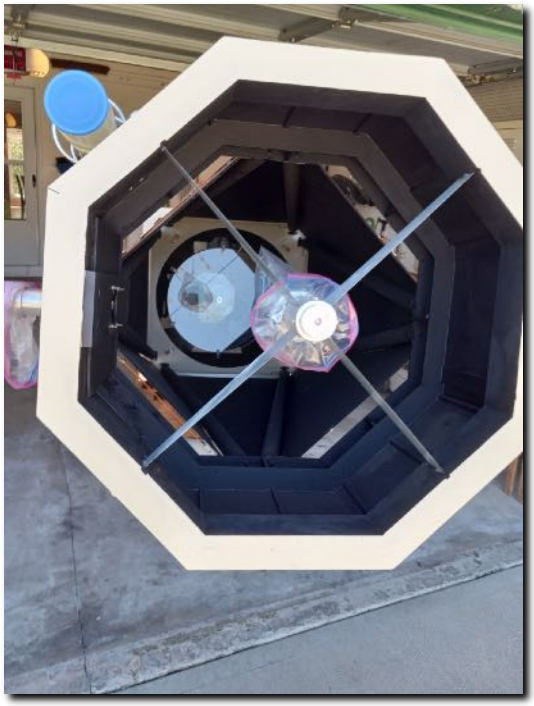
Above and Right:

For sale fine 18-in equatorial reflector with a professional Don Lumas mirror with a F/ratio for 4.45, 80.1 in focal length still in box. Willing to sell for $2,000 but will consider any offer

Far Right and Below:

Well made 26 in f4.7 focal length FL 122 in Dobsonian. Mirror not silvered and gives nice view of moon. Will sell for $2,000 but will consider any offer

Contact Ollie at 636-253 8530.



St. Louis Astronomical Society
Devoted to the Interest and Advancement of the Science of Astronomy
Executive Board Meeting Minutes 3/2/2023

1. Opening Activities a. Attendance: Jim Small, Mark Jones, Larry Campbell, Randy Harrison, Brent Buch, Bill Winningham, David Trumbo, Dennis Latinette, b. Open Meeting; Meeting opened at 7:05pm c. Approval of last month's meeting minutes. Motion to approve Larry second by Brent, minutes approved. d. Next Board meeting date: Apr 6, May 4, June 1, July 6, Aug 3, Sep 7, Oct 5, Nov 2, Dec 7 Meetings will be via Zoom until further notice: Action: Brad to ship mug to Stephen Hummel, still in work. UPS was expensive. Brad will send USPS Action: Brad to submit invoices for Stephen Hummel postage. Action Jim to purchase plaques or 3 anniversary plaques for members with more than 50 years for presenting at January meeting. Response: Done and receipts submitted and re-imbursed SLSC Will Synder SLSC Update. No report

2. Upcoming General Membership meeting topics:
a. **Speaker**: b. Special Awards needed: Special Anniversary Plaques, remainder of NSN pins and Service Pins c. Speaker Press Release: Rich has sent out press release d. Special Business – Equinox Prizes e. A101 – Dr. Strangelove or: How I Learned to Stop Worrying and Love the Big Bang **Action: Jim Small to contact Wash U about parking remedies.** Standing Action: Jim to display list of expiring memberships at start of Monthly General Meeting. Mark will add to slideshow
f. **Hospitality:** Larry will not be at meeting, Dennis Latinette will set up food. **Action: Dennis Latinette will set up food at March Meeting. Action: Larry will take items to Wash U store room before the meeting. Mark will bring ice and coffee.**

3. SLAS Financial Report as of Jan 31, 2023 a. Balance Sheet: Total Assets $90K, b. Profit/Loss report: exspense: $400 to ASEM for scope dollys, c. Annual Budget meetings: not until Septemer d. Corporate filings: not due until May **Action: Bill will adjust depreciation of scope and dome based on replacement cost Action: S&T raised rates and need to update PayPal, other SLAS materials and newsletter**

4. Speaker Committee Jeff Nee from the MIE Alliance, NASA speakers a. Budget – 2023 Budget $400 b. Upcoming speakers:

SLAS Monthly Meeting Presentations 2022-2023

Month	Name	Topic	Sponsor
Mar-17-2023	Harry Krantz	A Sky Full of Satellites	Univ of AZ
April-21-2023	Jonathan Katz	Arrokoth's Necklace, Boyajian's Star	Washington U.
May-19-2023	William McKinnon	Missions to Jupiter's Moons	Washington U.

Jun-16-2023 21-Jul-2023 18-Aug-2023 15-Sep-2023 20-Oct-2023 17-Nov-2023 15-Dec-2023**Action: Mark to target Peggy Hill about 2023 & 2024 eclipses** d. Topics of interest UAPs e. Stipends- Board agrees Harry Krantz as a grad student qualifies for $100 honorarium f. Travel - None

5. Membership Initiatives a. Budget – 2023 Budget $600 b. Welcome Aboard Meetings – c. Raffles – none planned d. Attendance prizes – March meeting Equinox prizes, Send suggestions for Brad

6. Membership Recognition a. Total Budget 2023 Budget $500 b. NSN Outreach Awards: February Meeting each year. c. Membership Report: February 2023 report showing 242 members which is a decline of eight members from the start of the year. Family members (counting two members) appear to be renewing as adult members (counting only one member) which helps to explain most of the decline. Standing Action: Bill to provide list of expiring memberships to SLAS Board and Jim for newsletter d. Member anniversary – e. Special Award program- Notes from Feb 13th committee meeting. We will can the deadline dates as follows: Nominations will open on Jan 1st for the following calendar year. The deadline for nominations is Sep 1st of each calendar year. The Award Review Committee will meet and select awardees by Oct 1st. The Award Review Committee will purchase awards and present them at the December general membership meeting. Several SLAS members have been asked to join the committee. 2023 Committee members are now: Larry Campbell, Jim Small, Mark Jones, Sharon Bertram, Fred Schovanez, Bill Neubert, Grant Martin, Bill Bierman.
Action Closed: Larry to contact Rich Heuermann, Joe Marcus, Bill Breeden to see if they are interested in joining the committee. Response: Joe Marcus and Rich Heuermann. Bill Breeden could not join committee Action Closed: Mark to update process on Website with new dates. Response: Website has been updated
Action: Jim to add permanent box to newsletter with dates for awards as a reminder to members
Action: Jim to add Rich Heuermann and Joe Marcus to recognition@slasonline.org distribution list. Larry to send email addresses for new folks 1. Special Award Committee report: Chairman – Larry Campbell, Jim Small, Mark Jones, Sharon Bertram, Fred Schovanez, Bill Neubert, Joe Marcus and Rich Heuermann
2. Special Award deadlines: Current Nomination deadline is Sep 1st 3. Nomination reviews: deadline Oct 1st.
4. Award selection:
5. Awards presented at December meeting

7. Outreach - a. Budget – 2023 Budget $500 b. Member Training Program Status: c. Purchase of T-shirts for volunteers completed training d. Purchase of lawn signs: e. Upcoming outreach events: f. Awards/recognitions – Completed at February meeting g. NSN Outreach hours YTD:

8. Old Business: Eclipse glasses (10,435) have been delivered and paid for. We have our 10,000 eclipse glasses. What is our plan for selling, handouts, etc. Set up pricing schedule, Total cost with shipping: $3,056; qty received: 10,677; Unit cost= $0.286. **Action: Add eclipse glasses to new Business next month for discussion of pricing schedule, sales and distribution**

9. New Business: Eclipse Expo at SEMO, should we get a table? more tables? ***Motion: I (Mark Jones) propose we contribute $100 for named sponsorship and spend additional $50 for exhibit table at the 2023 Eclipse Expo. Total expenditure of $150 coming from Eclipse budget. Motion seconded by Larry Campbell. Motion approved by Board***
Exhibitor pricing options are listed below, our table could be free, but we can purchase extra or become a sponsor. Standard ($50) (Non-profits only) - 8' x 30" Table in 10' x 10' area. Sponsor Level - Named Sponsorships ($100) SLAS 2023 Budget Description 2023/2024 Eclipse The budget includes $500 to fund an escrow account to fund preparatory activities for the upcoming 2023 annular and 2024 total eclipse **Action: Mark purchase table and sponsorship for expo** 4. ***Motion: By Mark Jones to support Electronically Assisted Astronomy, I propose SLAS buy a HDMI RFI transmitter/receiver for use at planetarium. This will allow members to transmit their telescope images to inside the planetarium for remote viewing. Total expenditure not to exceed $175 and use telescope sales funds to procure this equipment. Seconded by Jim Small. Motion has passed***
RF HDMI transmitter for use at Planetarium for $175. iogear wireless HDMI connect kit 687228 https://www.avaccess.com/products/hdw100/?gclid=EAIaIQobChMI_8u87cX4_AIVYDizAB0ZsQx5EAQYASABEgJ8nfD_BwE **Action: Mark to procure HDMI RFI transmitter/receiver to use at planetarium and other Outreach events**

10. Other Committee Reports: If needed

A. SLSC Business: a. First Friday actions – According to Will Snyder, outdoor event cancelled due to weather forecast, but SLAS can still set up indoors b. Other immediate business Action Closed: Mark to contact Will Snyder and set up meeting to discuss 2023 planning. First Fridays, Solar Saturdays, special Astro events, SLAS meetings. Response: All events planned.
B. SLCL Business a. Annual contract – b. Upcoming events -
C. Jefferson College Business: a. Committee Meeting report: New fan cable for 16" received and installed. Mark met with JC representative about ramp and steps for storage shed. Ramp will be built by carpentry classes by end of this semester (May 2023). b. Upcoming Outreach Event: **Action: Jim to purchase new Handbox for 10" LX200 from Meade Action. Jim to contact Explore Scientific and get firm quote for upgrade**
D. Library Telescope Committee a. Budget – 2023 Budget none requested, expenses will be covered by escrow balance of $2460 b. Upcoming builds or maintenance events - Next build March 11th

(Continued on page 9)

St. Louis Astronomical Society
Profit & Loss Budget vs. Actual
January through March 2023

	Jan - Mar 23	Budget	$ Over Bud...
Ordinary Income/Expense			
Income			
Events Income			
Homemade Fest		125.00	(125.00)
Events Income - Other	250.00		250.00
Total Events Income	250.00	125.00	125.00
Magazine Subscription	755.45	1,033.25	(277.80)
Membership Dues	1,235.00	1,370.00	(135.00)
Total Income	2,240.45	2,528.25	(287.80)
Cost of Goods Sold			
Magazine Subscriptions	775.25	1,006.25	(231.00)
Merchandise		300.00	(300.00)
Total COGS	775.25	1,306.25	(531.00)
Gross Profit	1,465.20	1,222.00	243.20
Expense			
1-Programs & Events	535.00	670.00	(135.00)
2-Newsletter	380.62	125.00	255.62
5-Loaner Scopes	680.95	50.00	630.95
6-Brochures		150.00	(150.00)
8-Website	325.28	250.00	75.28
9-Administrative Expenses	877.86	950.70	(72.84)
Total Expense	2,799.71	2,195.70	604.01
Net Ordinary Income	(1,334.51)	(973.70)	(360.81)
Other Income/Expense			
Other Income			
Donations	146.52		146.52
Interest Income	5.87	10.00	(4.13)
LTP Receipts	2,426.73		2,426.73
Total Other Income	2,579.12	10.00	2,569.12
Other Expense			
Eclipse Escrow Dispurseme...	50.00		
LTP Disbursements	3,182.97		3,182.97
Total Other Expense	3,232.97		3,232.97
Net Other Income	(653.85)	10.00	(663.85)
Net Income	**(1,988.36)**	**(963.70)**	**(1,024.66)**

St. Louis Astronomical Society
Balance Sheet
As of March 31, 2023

	Dec 31, 22	Mar 31, 23
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	16,660.91	13,423.18
Deposit, Certificate of	15,976.91	15,981.75
Library Telescope Escrow	2,459.77	1,663.45
PayPal	494.39	45.15
Savings - First Bank	41,153.95	41,454.98
SLAS Eclipse Conference Escr...	0.00	3,394.76
Total Checking/Savings	76,745.93	75,963.27
Other Current Assets	1,050.61	675.61
Total Current Assets	77,796.54	76,638.88
Fixed Assets	12,460.24	11,629.54
TOTAL ASSETS	**90,256.78**	**88,268.42**
LIABILITIES & EQUITY		
Equity		
Opening Bal Equity	8,497.66	8,497.66
Retained Earnings	75,243.71	81,759.12
Net Income	6,515.41	(1,988.36)
Total Equity	90,256.78	88,268.42
TOTAL LIABILITIES & EQUITY	**90,256.78**	**88,268.42**

(Continued from page 8)

c. Maintenance budget – none requested d. Mileage reimbursement – see above e. Promotional materials - none requested

E. SLAS Social Events a. Budget – 2023 Budget $365, b. Homemade Fest - 2023 budget $125, 2 green lasers transferred to HF budget, Mark coffee, Larry ice c. Star-B-Q – 2023 budget $240 Other

F. SLAS Brochures a. Budget 2023 $600 b. Quarter cards – Possibly print new cards with JCO, Arch, Tower Grove events

G. Loaner scope Program a. Budget – 2023 Budget $ 100 b. New donations: none this month c. Replacement Parts for the LPTs d. Items for sale several: **Status for sale items $400 taken in this month** SOLD - Orion SkyView 8" Newtonian. Compact f/4 telescope. Metal tube, $150 SOLD - Celestron SP-C102 4" Refractor with EQ mount, $150 SOLD 6-inch f-8 Criterion Reflecting Telescope, $50 SOLD Bell and Howell, Heavy duty camera tripod w/1/4x20 screw mount, $10 SOLD Bausch and Lomb 60mm 15-60x Zoom Spotting scope, erect image, 15x to 60x zoom. Aluminum tripod, Stainless Steel head, $40

H. SLAS Library a. Budget – 2023 Budget $500, balance $500 b. Other – **Action: Jim to give Mark all the 2022 books so he can add to inventory list**

I. Merchandise Action: Mark to finish artwork for send to mug company New coffee mug design (JCO logo, SLAS Logo) We used Discountmugs.com in 2018

J. Telescope Making

K. Newsletter a. Budget 2023 $600, balance $600

L. Website - a. Budget 2023 $750, balance 640

M. Social Networking Facebook 2,366 followers

N. Night Sky Network

O. SLASdialogs – 183 members

P. Dark Site - Events have been placed on SALS calendar

Q. Observing Programs - John and Kay Strebeck submitted their logs for their AL Outreach Awards

R. Star Parties Donation: None for this month

11. Closing Activities Larry motion to end meeting, second Brent meeting adjourned at 9:39pm

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 for 2023: 5/4, 6/1, 7/6, 8/3, 9/7, 10/5, 11/2, 12/7

SLAS Dark Sky Observing Dates

Francis Park Events: These events are on Wednesdays of the week nearest the first quarter Moon 4/26, 5/24, 6/21, 7/26, 8/23, 9/20, 1018

Aim for the Stars Public events held on 1st Sundays at the Jefferson College Observatory and Patio. 5/7, 6/4, 7/2, 8/6, 9/3, 10/1, 11/5, 12/2

Stargazing at the Arch Events for the public held at the Gateway Arch
See you next year!

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

Pattonville Observatory Public Viewing Dates 2022-2023: 4/20, 4/28, 5/5, 5/12

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
21 Fri	SLAS Regular Meeting
24 Mon	SLSC Solar Public Telescope
24 Mon	STEMSTL Star Party
24 Mon	Stargazing at Bluebird Park
25 Tues	Manchester Park
26 Wed	Francis Park Stargazing
27 Thur	Carpenter Library Star Party
27 Thur	Zoom: SLAS New Member
29 Sat	Tower Grove Stargazing
29 Sat	Stacy Park Stargazing
	May
1 Mon	Parkview Library
4 Thur	SLAS Board Meeting
5-7	RASC GA conference
5 Fri	First Friday Telescope View SLSC
7 Sun	Aim For the Stars at JCO
19 Fri	SLAS Regular Meeting
20 Sat	SLAS Dark Sky at Danville
20 Sat	SLAS Dark Sky at JCO
24 Wed	Francis Park Stargazing
25 Thur	SLAS New Member Zoom
26 Fri	Crestwood Park
26 Fri	Stargazing at the Arch
27 Sat	Tower Grove Stargazing
	June
1 Thur	SLAS Board Meeting
1 Thur	Thornhill Library
2 Fri	First Friday Telescope View SLSC
4 Sun	SLSC Solar PTV
4 Sun	Aim for the Stars at JCO
4-8	AAS Meeting
6 Tues	All American Gymnastics
6 Tues	Bethesda Gardens Ed Prog
9-11	MSRAL Conference - Tulsa, OK
11 Sun	SLSC Solar PTV
16 Fri	SLAS Regular Meeting

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

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secretary at slasonline.org

Treasurer ***Bill Winningham, (Don Ficken - membership)***
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Hospitality ***Larry Campbell*** 636-244-2867
hospitality at slasonline.org

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board23 at slasonline.org

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

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

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

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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

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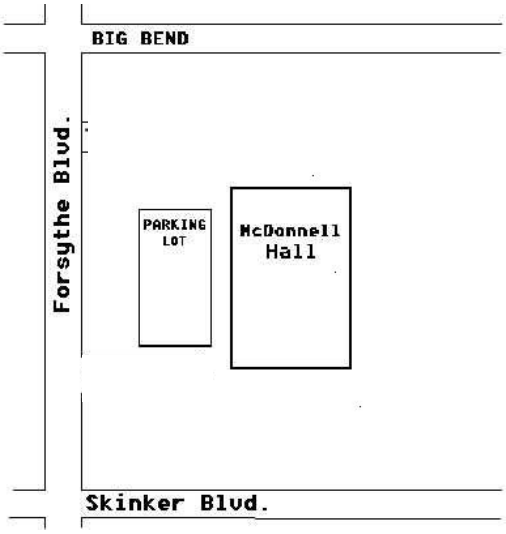
Who We Are and What We Do

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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