THE EVENT HORIZON

ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

VOLUME 33, Issue 2
February, 2023

Pushing the Redshift Frontier with the James Webb Space Telescope

by

Dr. Haojing Yan
Dept of Physics and Astronomy
University of Missouri, Columbia

Dr. Haojing Yan of the Department of Physics and Astronomy, University of Missouri, Columbia will be featured at the February meeting of the Saint Louis Astronomical Society. The meeting will begin at 7:30 PM Friday, February 17 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.

The James Webb Space Telescope (JWST) was launched on December 25, 2021 and became fully operational in Summer 2022. One of its primary research areas is the study of galaxies when the universe was very young. Dr. Haojing Yan will discuss some of the JWST findings in this area. As he describes his presentation, "Within merely a month after it began its official operation, the JWST has changed the landscape of the study of the early universe. The most exciting result is the discovery of candidate galaxies… from a time only about 200 million years after the Big Bang. It is extremely surprising, however, that there are so many such candidates and that they are so bright. I will be giving an overview of the latest development on this frontier and our path forward. "

Dr. Yan is an Associate Professor in the Department of Physics and Astronomy. He is an observational astronomer who has a broad interest in galaxy formation and evolution., Currently his interests largely focus on three subjects: (1) searching for and understanding galaxies in the early universe when it was only less than 1 billion years after the Big Bang, (2) investigating the mass assembly history of galaxies over cosmic time, and (3) understanding the dust-embedded star formation processes in galaxies near and far.

February Meeting will be In Person and Zoom

The SLAS meeting for January will be via Zoom only. In-person meetings will resume in February. The Zoom room will be open from 7-10 pm.

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

Homemade Fest: Saturday, February 18!

Be sure to join us for a fun evening of presentations by your fellow members along with great food and comradery!

Just to remind you, it's the day after our February meeting and will be held at the Kirkwood Community Center.

More details inside!

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President's Corner

by

Jim Small

It's a busy weekend for SLAS! At the IN PERSON meeting in February, we will be awarding Night Sky Network outreach pins along with some other awards. We will hear from John Strebeck about his experience this summer in the badlands and Mark will present stuff for sale by SLAS. Then, Saturday night will be filled with fun as the annual Homemade Fest will take place at the usual Kirkwood Community Center. Can't wait for that either! It should be another good evening, esp if it's cloudy and people don't go out to dark sky locations. If you want to present, just let Mark Jones know at the beginning of the event. Can't wait to chow down on all that food! Wonder what Carl will bring this year… (he always has something interesting and different!) Already have the stuff for the jambalaya here…

Dates for MSRAL have been announced but registration is not yet open. The dates are June 9-11 at the Jenks Planetarium in Tulsa, Oklahoma. Hope to see you there!

Spring is coming and a plethora of star parties will soon begin to emerge on the calendar. Be sure to watch for them and volunteer for those you can get to. The more the merrier. It will help if you sign up in advance so we know a particular event is covered. If you are interested in being a lead for any event or learning how to do that, be sure to contact Bill Breeden and he will fill you in!

See you Friday and Saturday nights! Jim Small

Visitor at the Aim For the Stars event getting a view of Jupiter through my reconditioned Celestron Fluorite Apo 80mm scope. Very crispy views of the planets! It will be on display at Homemade Fest.

SLAS Memberships Expiring in February

John	Sullivan
Richard	Jennings
Richard	Rodgers
Zuzana	Schneider
Craig	O'Mara
Gabe	Batson
Randy	Jotter
Julian	Barnes
José	Garza

SLAS Memberships Expiring in March

William & Rita	Breeden
Rhonda	S. Whelan
Bill	Biermann
Richard	Fefferman
Gene	Dultz, Jr.
Benjamin (Ben)	Winningham
William	Winningham
Robert	Goddard
Mary	Barteau
Steve	Weaver
Jeff	Kisslinger
Nick	Bodi
Chris	Althen
Joseph	Abs
|Ashvik	Chilakala
Arianna	Riggs
Jamie	Johnson

Volunteers to Receive NSN Outreach Pins and Certificates at the February Meeting

Currently we have 28 members who have reached the 2 or more event threshold for certificate and pins

If possible, please make it to the February meeting to receive your pin! We look forward to recognizing you!

Name	Events		Hours
John Strebeck	97	events	240
Donald Ficken	36	events	107
Bill Breeden	31	events	52
Mark Jones	21	events	77.5
Cook Feldman	18	events	60
Richard Fefferman	18	events	35.5
Dennis Latinette	14	events	42
Rick Menendez	11	events	28
Ronald Sides	10	events	24
Randy Harrison	9	events	36
Rich Heuermann	9	events	24
Carl McCullough	8	events	29
James Small	8	events	28
Bradley Waller	8	events	23
Maryanne Angliongto	6	events	19.5
Rita Breeden	6	events	18.5
Richard Jennings	6	events	15
Alfred Schovanez	5	events	17
Phyllis Nolan	5	events	14.5
Larry Campbell	4	events	10
Frank Mack	3	events	17
James Malke	3	events	12
Christian Schulte	3	events	9
Larry Meyer	3	events	8.5
Lalit Chouhan	3	events	5
Jeff Carpentier	2	events	14
Kenneth Levy	2	events	6
Orevia Vongsa	2	events	5

Homemade Fest 2023

Kirkwood Community Center
In Kirkwood Park

Turn west off Geyer into Kirkwood Park at Madison and Geyer road. Turn right for the Community Center. Enter at the main entrance by the flagpole. Third floor, room 300. An elevator is available on the left as you enter the building. Carts are available for equipment.

Saturday Evening, February 18, 2023

Doors open at 4:00 to unload equipment and food and set up the room.

We will begin eating as soon as the food is ready, usually around 6 pm.

Formal Opening and presentations begin at approximately 6:45pm.

This is a show-and-tell meeting. Members are encouraged to present anything of astronomical interest they have bought, built, refurbished, improved or just can't do without. You can present your favorite image or explanation of a concept as well. This is your chance to share with your fellow SLAS members.

SLAS will provide the soda, coffee and paper goods.

Bring a favorite dish or dessert to share and let's enjoy each other's company and love for Astronomy on this long winter's night.

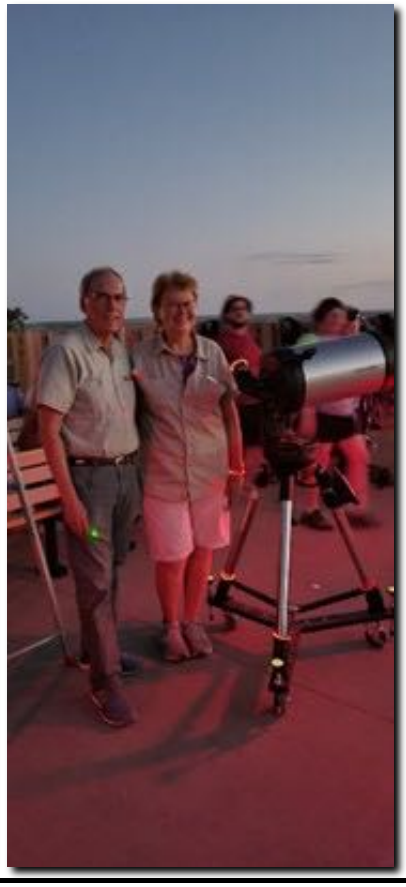
Attendance prizes will be drawn throughout the evening

If you have questions or wish to present, please contact Mark Jones for more information at 636-394-2342

This event is free to all SLAS members and their families. Guests are $5 each.
RSVP on SLAS Night Sky Network is optional but encouraged so we know how many people to expect.

SLAS Members John and Kay Strebeck in the Badlands

Kay and I had a marvelous summer in Badlands National Park (South Dakota), where we were Volunteer Rangers. It was a fantastic experience for the setting (geology, fossils, wildlife) and especially for the people we met. Our main role was working with the Astronomy Team and giving the Night Sky Program from Memorial Day to October. Sharing the stars, and the Milky Way in particular, with Park visitors was incredibly rewarding because of their enthusiastic responses to the majesty of the heavens. We are most grateful for the visitors we encountered, the camaraderie of Astronomy Team members, the steadfast support of Park staff, and the constant encouragement of family and friends while we were off on our adventure.



Public Lecture - Thursday, March 2: Rewriting the Creation Story for the Earth and Moon 7:00 pm, Crow Hall 201 (in person)

Greetings,

I am pleased to inform you that Dr. Sarah T. Stewart, Professor at the University of California, Davis, will serve as the **2023 McDonnell Distinguished Lecturer** on March 2. Professor Stewart's research centers on the origin and evolution of planets. At UC Davis, Professor Stewart directs the Shock Compression Laboratory, which uses light gas guns to study shock waves in planetary materials and also conducts shock experiments on laser and pulsed power platforms. She is the recipient of a MacArthur 'genius prize' for her work on planetary collisions and the discovery of synestias, the Urey Prize from the American Astronomical Society's Division for Planetary Sciences, and a Presidential Early Career Award for Scientists and Engineers. Professor Stewart was also a featured speaker on Ted.com for her work on the origin of the Moon. https://mcss.wustl.edu/events/public-lecture-rewriting-creation-story-earth-and-moon?d=2023-03-02

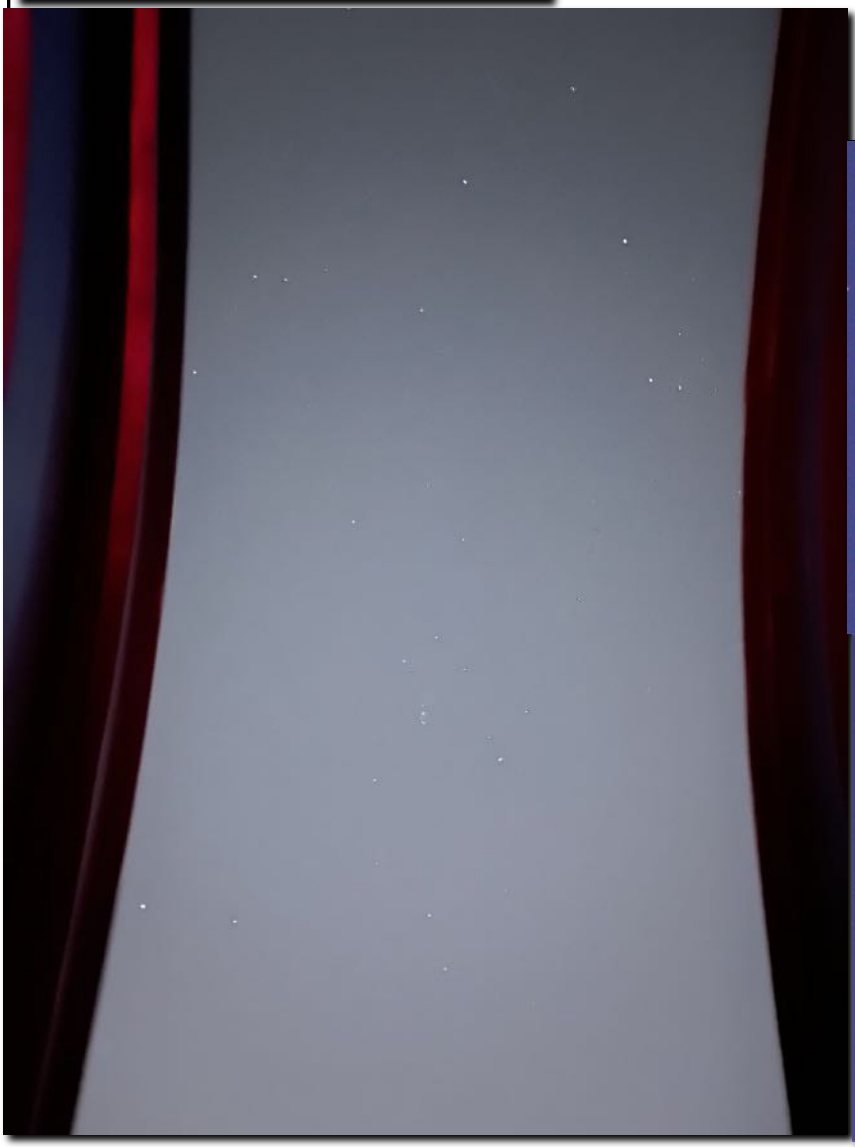
Professor Stewart is dedicated to public outreach and is a star in the exploration of planetary collisions and the physics of planetary impacts. I look forward to welcoming you to the public lecture on March 2. If you are unable to attend, the recording will be posted on the website by March 10.

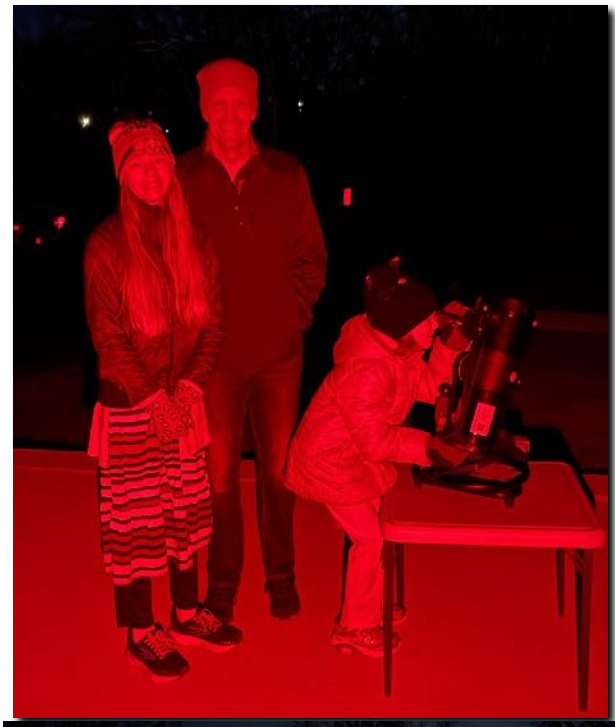
Sincerely,
Bradley L. Jolliff
Scott Rudolph Professor of Earth and Planetary Sciences
Director, McDonnell Center for the Space Sciences

Pattonville Observatory Open Again to Good Crowds

Pattonville Observatory reopened this school year to good size crowds ranging from the 56 people that attended the first event in September and averaging 20-30 on clear nights. It is open to the public twice a month. Dates this spring include: 2/24, 3/10, 3/31, 4/14, 4/28, 5/5, 5/12. Hope to see you there! **Right**: Mark Jones visits and images with his

Canon through the Orion Short Tube 80mm **Left and below left:** iPhone 12 shots, the Moon through the 10 Meade, Orion through the dome. **Below:** Comet C/2020 V2 (ZTF) and the Orion Nebula through the 80mm with Marks Canon DSLR.





A gallery of photos from the February 5 Aim for the Stars event held at the Jefferson College Observatory. All photos by Jim Small using iPhone 12. in night shot mode.

Left: A family brought a library telescope they checked out.

Scopes at the event included a Nextstar 6, Skywatcher 100mm, 8" dob, 80mm refractor.

Targets included the comet, objects around Orion and Jupiter and Venus

St. Louis Astronomical Society
Devoted to the Interest and Advancement of the Science of Astronomy
Executive Board Meeting Minutes 1/5/2022

1. Opening Activities a. Attendance: Small, Waller, Harrison, Campbell, Buch, Jones, Kelly, Roe, Winningham, Fischer b. Open Meeting; Meeting opened at 7:03pm c. Approval of last month's meeting minutes. Motion to approve the Dec minutes by Larry second by Randy, minutes were approved d. Next Board meeting date: Feb 2, Mar 2, 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 Action: Brad to submit invoices for Stephen Hummel including coffee mug and postage. Action: Larry to submit wording for 3 anniversary plaques for members with more than 50 years for presenting at January meeting. Design still in work. Action Jim to purchase plaques or 3 anniversary plaques for members with more than 50 years for presenting at January meeting. Action: Mark to contact Will Snyder and set up meeting to discuss 2023 planning. First Fridays, Solar Saturdays, special Astro events, SLAS meetings** SLSC Will Synder SLSC Update

2. Upcoming General Membership meeting topics: a. **Speaker**: Rich Heuermann- Far Encounters – Robot Spacecraft Visits to Planets, Moons, Asteroids and Comets b. Special Awards needed: **3 anniversary plaques for members with more than 50 years for presenting at January meeting.** c. Speaker Press Release: Needs to be released Rule changes at Wash U does not allow advanced scheduling of rooms for January, May, September. This means we cannot be sure that McDonnell Hall is available until week of the meeting during the start of each semester. For January we will promote meeting as virtual only and if room is available, we will add promotion for in-person meeting. **Action: Rich will issue press release for January as a virtual meeting only.** d. Special Business – Check NSN volunteer hours by Jan 15th e. A101 – Shanna Ramirez "Astronomy for Toddlers" **Standing Action: Jim to display list of expiring memberships at start of Monthly General Meeting** f. **Hospitality:** Nothing special planned

3. SLAS Financial Report (as of Nov 30) a. Balance Sheet: cash assets $77K, fixed assets, $12K, total assets $91,158 b. Profit/Loss report: net income $7400 c. Annual Budget meetings: Complete and budget approved at December SLAS meeting d. Corporate filings: not due until May **Action: Bill will adjust depreciation of scope and dome based on replacement cost Action: All committees submit all receipts for 2022 expenses NLT Jan 25th**

4. Speaker Committee a. Budget – 2023 Budget $400 b. Upcoming speakers:

SLAS Monthly Meeting Presentations 2022-2023

Month	Name	Topic	Sponsor
Jan-20-2023	Rich Heuermann	Far Encounters – Robot Spacecraft Visits to Planets, Moons, Asteroids and Comets	
Feb-17-2023	Haojing Yan	Pushing the Redshift Frontier with JWST	UM-Columbia
Mar-17-2023			
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 d. Topics of interest **Action – John Strebeck looking into Univ of Arizona speakers** e. Stipends f. Travel

5. Membership Initiatives a. Budget – 2023 Budget $600 b. Welcome Aboard Meetings – c. Raffles – d. Attendance prizes – Send suggestions for Brad **Action: Randy to send list of possible prizes to Brad**

6. Membership Recognition a. Total Budget 2023 Budget $500 b. NSN Outreach Awards: February Meeting c. Membership Report: December 2022 membership report shows that we ended 2022 with 250 members representing a gain of five members over last year. Individual members increased by 13 members and youth members increased by one member. Family membership declined by 10 members. We did not add as many new members in 2022 but did a better job of retaining existing members. **Standing Action: Bill to provide list of expiring memberships to SLAS Board and Jim for newsletter**
d. Member anniversary – Awards presented at November meeting and +50year plaques to be presented at January meeting e. New Award program- 1. Special Award Committee report: Chairman – Larry Campbell, Jim Small, Mark Jones, Cook Feldman, Sharon Bertram, Fred Schovanez, Bill Neubert 2. Special Award deadlines: Current Nomination deadline is May 1st **Action: Larry to setup recognition committee meeting to discuss Special award process that has been documented and approved for possible changes** Jim procured perpetual plaques and displayed them at December meeting Jim purchased the 2022 Special Award plaques and these were presented at December meeting 3. Nomination reviews: 4. Award selection: 5. Awards presented at December meeting

7. Outreach - Jim updated website with 2023 Francis Park Events Flyer Mark added Francis Park events to Facebook page Discuss considerations for staffing of outreach events for 2023. 23 events (JCO, Francis Park, Tower Grove, Arch) are planned for 2023 and that does not include Library events or SLSC events. If SLSC events (First Friday and Solar Sundays) happen, then this would add another 21 events for 2023. Then, if we add 2-4 Library Telescope events per month, that would be 24-48 more events 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 – At February meeting g. NSN Outreach hours YTD: for 2022 1050 hours, for 73 in-person events

8. Old Business: From October 2022 Board meeting. Order has been placed and Bill sent logo. $3056 invoice will be sent. They will send us proof to sign-off on before they print. **Action: Bill to purchase eclipse glasses.**

9. New Business: Jim added Shanna's Toddler's presentation to SLAS website Mark purchased Microsoft Publisher per motion at Decem**ber meeting** Jim Roe brought up parking issues at Washington University, which makes it a long walk from garage to McDonnell Hall. Are there alternatives? **Action: Jim Small to contact Wash U about parking remedies.**
Motion: Mark proposes we buy both telescope dollies from ASEM for $225 each. These will be used for SLAS telescopes at JCO or at other star party venues. Money will be used from Loaner Scope sales escrow account. Motion seconded by Randy Harrison. Motion passed. https://www.cloudynights.com/classifieds/item/321723-wheelybar/ https://www.cloudynights.com/classifieds/item/321721-scopebuggy/

10. Other Committee Reports: If needed

A. SLSC Business: a. First Friday actions – b. Other immediate business **Action: Mark to contact Will Snyder and set up meeting to discuss 2023 planning. First Fridays, Solar Saturdays, special Astro events, SLAS meetings**
B. SLCL Business a. Annual contract – b. Upcoming events -

C. Jefferson College Business: a. Committee Meeting report: b. Upcoming Outreach Event: **Action: Jim to purchase new Handbox for 10" LX200 from Meade**From September 2022 Board Meeting - Telescope at observatory still having RA motor issues. Have done several fixes. Working ok atm. Consensus decision is if repair work is needed, to have the system upgraded to Explore Scientific's PMC-Eight system. It would be a complete replacement of the electronics and motors/encoders for the scope. – Cost about $3000, approx 3 months down time. We would drive the scope to the company. We would need board approval for the operation and member approval for the funds. To avoid unneeded down time in case it comes to that, I move that the board approve the installation of the PMC-Eight system and that it be brought before the membership as well to be pre-approved. Both of these votes are *IN CASE* we need to do the upgrade, sort of a pre-approval in case we need to pull the trigger on the

(Continued on page 8)

These are two photos from the Jefferson College Observatory Patio. Both were shot with an iPhone 12 Max Pro in night shot mode. Night shot allows the user to hand hold a photo up to ten seconds in length. The camera shoots lots of images while it posts two crosses, one white and one yellow for you to keep aligned as best you can. It then uses a registax type program to combine the images. If the phone is on a tripod, you can expose up to 30 seconds. Wider view on the left (Sirius to the Pleaides) Sharper view on the right Both 10s.

operation, we can act without the delay of notification and voting by the membership. That will create the least down time for the observatory. *Motion: The SLAS board approves the upgrade of the Meade 16" LX200 telescope for the observatory to the Explore Scientific PMC-Eight system electronics at a cost of $3000 plus transportation costs if needed. The motion will be brought before the membership for pre-approval.* **September Board Meeting – Motion "On Hold" Jim has solicited firm quote specific to our 16" telescope to know exactly what the upgrade will include. Board has decided to delay sending motion to general membership until firm quote can be received and reviewed 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 c. Maintenance budget – none requested d. Mileage re-imbursement – see above e. Promotional materials - none requested
E. SLAS Social Events a. Budget – 2023 Budget $365, b. Homemade Fest - 2023 budget $125, projected date is Saturday February 18th **Action: Jim will book room at Kirkwood Community Center** 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: c. Replacement Parts for the LPTs d. Items for sale **several: Action: Mark to put together listing of telescopes for sale.**

H. SLAS Library a. Budget – 2023 Budget $500 b. Other –

I. Merchandise New coffee mug design (JCO logo, SLAS Logo) - www.startorialist.com We used Discountmugs.com in 2018 Brent presented 10 different mug layouts. Board selected layout #1 but with black background

J. Telescope Making

K. Newsletter a. Budget 2023 $,

L. Website - a. Budget 2023 $,

M. Social Networking SLAS Public Facebook as of Jan 5, 2023 Followers: 2,228. Gender: Men 30.10%; Women 69.90%. Location of followers: St. Louis 286 followers; O'Fallon 73; Saint Peters 65; St. Charles 58; Ballwin 46; Chesterfield 44; Oakville 43; Kirkwood 38; Wildwood 37; Maryland Heights 36

N. Night Sky Network Currently we have 28 members who have reached the "2 or more events" threshold for certificate and pins. We should add 5 more for safety, therefore buy 33 pins for 2022

O. SLASdialogs
P. Dark Site
Q. Observing Programs
R. Star Parties Donation: None for this month

11. Closing Activities Motion to adjourn the meeting by Mark second by Jim meeting adjourned at 10:45pm.

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

	Jan 23	Budget	$ Over Bud...
Ordinary Income/Expense			
Income			
Magazine Subscription	277.80	399.70	(121.90)
Membership Dues	360.00	280.00	80.00
Total Income	637.80	679.70	(41.90)
Cost of Goods Sold			
Magazine Subscriptions	285.00	399.70	(114.70)
Total COGS	285.00	399.70	(114.70)
Gross Profit	352.80	280.00	72.80
Expense			
1-Programs & Events		110.00	(110.00)
2-Newsletter		125.00	(125.00)
5-Loaner Scopes	680.95		680.95
8-Website	110.00	250.00	(140.00)
9-Administrative Expen...	7.32	291.90	(284.58)
Total Expense	798.27	776.90	21.37
Net Ordinary Income	(445.47)	(496.90)	51.43
Other Income/Expense			
Other Income			
Interest Income		5.00	(5.00)
Total Other Income		5.00	(5.00)
Net Other Income		5.00	(5.00)
Net Income	(445.47)	(491.90)	46.43

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

	Dec 31, 22	Jan 31, 23
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	16,660.91	16,745.36
Deposit, Certificate of	15,974.47	15,974.47
Library Telescope Escrow	2,459.77	2,469.69
PayPal	494.39	104.55
Savings - First Bank	41,153.27	41,153.27
Total Checking/Savings	76,742.81	76,447.34
Other Current Assets		
Inventory Asset	675.61	675.61
Undeposited Funds	375.00	225.00
Total Other Current Assets	1,050.61	900.61
Total Current Assets	77,793.42	77,347.95
Fixed Assets		
Accum Depr - Office Equp	(216.65)	(216.65)
JC Scope and Observatory	12,460.24	12,460.24
Office Equipment	216.65	216.65
Total Fixed Assets	12,460.24	12,460.24
TOTAL ASSETS	90,253.66	89,808.19
LIABILITIES & EQUITY		
Equity		
Opening Bal Equity	8,497.66	8,497.66
Retained Earnings	75,243.71	81,756.00
Net Income	6,512.29	(445.47)
Total Equity	90,253.66	89,808.19
TOTAL LIABILITIES & EQUITY	90,253.66	89,808.19

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 for 2023: 3/2, 4/6, 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. 3/5, 4/2, 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: 2/24, 3/10, 3/31, 4/14, 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:

SLAS Events

February

17 Fri	SLAS Regular Meeting
18 Sat	Homemade Fest
18 Sat	SLAS Dark Sky at Danville
18 Sat	SLAS Dark Sky at Jefferson College
23 Thur	Zoom-SLAS new member
27 Mon	Eureka Hills Library

March

2 Thur	SLAS Board Meeting
2 Thur	Natural Bridge Library
3 Fri	First Friday SLSC
4 Sat	Laumeier Park
5 Sun	Aim for the Stars
6 Mon	Mid-County Library
11 Sat	Library Telescope Build
15 Wed	SIUE Lifelong Learning Speaker
17 Thur	SLAS Regular Meeting
18 Sat	NCBW-STEAM
18 Sat	SLAS Dark Sky at Danville
18 Sat	SLAS Dark Sky at Jefferson College
22 Wed	Bluebird Park
23 Thur	Zoom-SLAS new member
28 Tue	Festus Public Library
30 Thur	LaSalle Springs
30 Thur	Samuel C. Sachs Library
31 Fri	Jefferson County Library

April

2 Sun	Aim for the Stars
6 Thur	SLAS Board Meeting
7 Fri	First Friday SLSC
15 Sat	SLAS Dark Sky at Danville
15 Sat	SLAS Dark Sky at Jefferson College
21 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!

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 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 @ $43.95 / 1 year $_____

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

Astronomy @ $34.00 / 1 year $_____

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Devoted to the Interest and Advancement of the Science of Astronomy

ST. LOUIS ASTRONOMICAL SOCIETY

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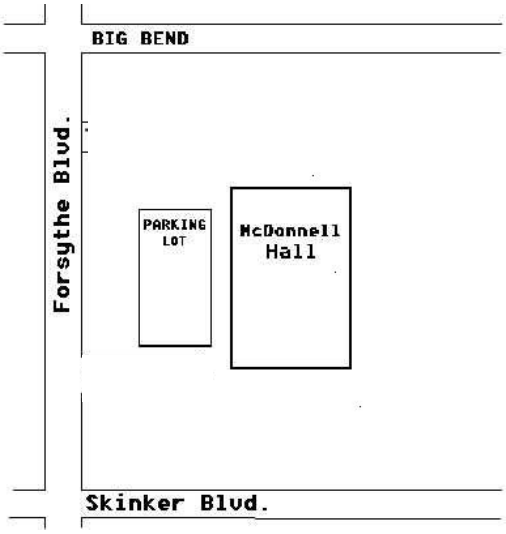
Who We Are and What We Do

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 anyone with an interest in astronomy.

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

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



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