THE EVENT HORIZON

ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

VOLUME 33, Issue 1
January, 2023

Far Encounters – Robot Spacecraft Visits to Planets, Moons, Asteroids and Comets

by

Richard Heuermann
Saint Louis Astronomical Society

Richard Heuermann will be featured at the January meeting of the Saint Louis Astronomical Society. The meeting will begin at 7:30 PM Friday, January 20, via Zoom online conference ONLY. For the Zoom link, see the article below. The event is co-sponsored by NASA's Missouri Space Grant Consortium

While plans are being developed for humans to return to the Moon this decade and to land on Mars someday, robot emissaries are exploring our solar system now, or in the near future. Mr. Heuermann will provide an overview of several of these robotic spacecraft missions. Included: new orbiters around Mercury and Venus, close fly-bys of Jupiter's satellite Europa with its subsurface liquid water ocean, a helicopter to study the surface chemistry of Saturn's satellite Titan, fly-bys of several of Jupiter's Trojan asteroids, and a trip to Psyche, the "metal asteroid".

Rich Heuermann is a member of the Saint Louis Astronomical Society and a NASA Solar System Ambassador. The Ambassadors are a nationwide network of individuals who present programs about NASA missions, astronomy and planetary sciences to school groups, civic groups, and the general public. Before retirement, he was the Administrative Officer of the Department of Earth and Planetary Sciences and the Outreach Program Coordinator for the NASA Missouri Space Grant Consortium at Washington University in Saint Louis. Prior to his University position, he was the Assistant Director of the McDonnell Planetarium, before its merger to form the Saint Louis Science Center.

Upcoming Meetings

February Haojing Yan JWST Early Universe UM-Columbia
March TBD
April Jonathan Katz Radio Bursts, or other Wash U.
May William McKinnon Missions to Jupiter's Moons Wash U.

January Meeting will be Zoom ONLY!

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

Welcome to 2023! We are off to a slightly rocky start as we have to meet via zoom for this month due to scheduling issues. Don't get me started! In-person meetings will resume with the February meeting.

Rich Heuerman will be doing the talk this month. He has spent the last couple of years doing presentations for St. Louis County Library, so he is well versed in doing Zoom presentations. I think you will like this one!

HOMEMADE FEST will be the Saturday after the meeting next month. It will be held at the Kirkwood Community Center, room 300 as usual. We will have the room from 4pm until 11 or so. There are carts inside for equipment and an elevator of course. I look forward to another year of cool projects and presentations along with good food! Can't wait to see what Carl brings this year! I suppose I'll bring my usual jambalya… it always seems to disappear! I've never had to take any of it home! Hey, even I have a project to discuss this year. Should be good.

SLAS has a bounty of telescopes for sale. I'll be sending out a special issue with all of the items included. I missed a couple of issues last year, so I'll send one of them out with a ton of pics and items for sale. If you have stuff you want to sell, send me a brief article and photos and I'll see if I can get it in for you. No charge for members of course!

Great talk from Alan Dyer last month and a nice job on the cake from Larry, too! Special Recognition Awards were given out last month, too. Congratulations to recipients Jim Melka, Rich Heuermann, Grant Martin and Don Ficken on their selection for the awards. Thanks to Muellers for the great job as usual on the plaques, including the perpetual plaque!

Next month we will have some special awards to give out and we will distribute the Night Sky Network outreach pins and certificates to all the folks who have two or more events in the article below. Be sure to check your numbers!

We are working hard to give you the best experience possible through SLAS. Be sure to ask any of us if you need some assistance with equipment or would maybe like to borrow some equipment to use. Whatever we can do to serve you… just let us know!

Looking forward to a good talk and interaction Friday! See you then! jrs

SLAS Memberships Expiring in January

Robert Drzymala
Thomas Duncan
Dale & Gaylene Engelbrecht
Ty Frauenfelder
Greg Gaines
Mike Hays
Richard Heuermann
Catherine Hooper
Ron Jones
Tom Keutzer
Nicholas Kirschman
Alex Miller
Brooke Myers
Rosanne Naunheim
John Schwartz
Donald Snyder
James Timper

SLAS Memberships Expiring in February

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

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

Be sure to check your hours before end of January.

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
Allex Goh	1	events	6
Frederick Fischer	1	events	6
James & Yvonne Roe	1	events	5
Mark Fedde	1	events	5
Richard Myhra	1	events	5
Wayne Clark	1	events	4
Nancy Clark	1	events	4
Joseph Barteau	1	events	4
Carl Masthay	1	events	3
Bill Biermann	1	events	3
Mary Barteau	1	events	3
Elisabeth Spratt	1	events	3
Yang Yang	1	events	3
Alan Jeude	1	events	3
Bo Cooper	1	events	3
John Duchek	1	events	2.5
William Neubert	1	events	2
Ethel Foster	1	events	2
Ken Hargrove	1	events	2
Robert Goddard	1	events	1.5
Ashvik Chilakala	1	events	1.5
Alan Sapia	1	events	0

Special Recognition Awards

We had our annual Special Recognition Awards at the December SLAS meeting.

Congratulations!

Jim Melka received the Robert E Cox Popularizing Astronomy award;
Rich Heuermann received the Richard Schwartz Supportive Faculty Award;
Grant Martin received the Alfred Woods Mentorship Award; and
Don Ficken received the Lois Fitter Outreach Award.
Jim Small shows off the Perpetual Plaque

Where are our Followers?

Below is a list of our followers of our public facebook page by location!

SLAS Public Facebook as of Jan 5, 2023

Followers: 2,228

Gender: Men 30.10%; Women 69.90%

Location of followers:

St. Louis, MO	286
O'Fallon, MO	73
Saint Peters, MO	65
St. Charles, MO	58
Ballwin, MO	46
Chesterfield, MO	44
Oakville, MO	43
Kirkwood, MO	38
Wildwood, MO	37
Maryland Heights, MO	36

Alan Dyer Speaks to SLAS

For the December meeting, Larry Campbell had a cake made that included one of Alan Dyer's aurora photographs! It was delicious!

Alan gave us a terrific talk from Canada. Because he has spotty internet, we watched him on video first then he was live on Zoom.

Camp Cedarledge Girls Scout days
by
Bill Bierman

The buses rolled in waves as excited Girls Scout exited the buses in groups of 30 on October 1st. Th weather was fabulous, and the bright blue sky told everyone that this day camp was going to be exceptional. SLAS was one of may participants who set up tables and displays for this daytime program that occurs annually at Camp Cedarledge in Pevely Mo. Other participants included the St. Louis Zoo, Mo Dept of Conservation, Challenger, Science center and many others. Most participants had one activity table set up, but since SLAS had multiple events planned, we set up 4 tables.

The girls, aged 8 thru 18, went from table to table in groups of 8, and stayed for 15 minute intervals. The first stop at our SLAS station was Buz McCullough's solar scope. Buz created a homemade solar funnel out of an oil funnel, and was able to show sunspots on his projection material. Buz also had fun "tricking" the girls, He had a yellow filter on the scope, and would ask "what color is the sun?". After seeing the yellow color, most (but not all) would answer "yellow", and Buz would promptly pull off the filter to show a whitish sun. That led to a discussion about prisms, white light etc.

Buzz MuCullough demonstrating his Solar Funnel

Bill Biermann and Buz McCollough

(Continued on page 5)

(Continued from page 4)

Our second station was simple, but simple was fun! Dennis Latinette set up some 15x70 binocs on a tripod. This station consisted of converting stored energy into kinetic energy (Oh, sorry, that's geek talk. In plain talk, we sent two girls running , and their friends got to see them in the distance thru binos). This simple exercise (no pun intended) was especially popular with the younger girls. It also led to discussions about Binocs for astronomy.

Dennis Latinette demonstrating Binos

The third station was staffed by former girl scout Annalise Biermann, and consisted of the Sun Spotter. This simple projection system did show some sun spots (ok, maybe a few of them where from dust on the optics). This also led to a discussion about the Earth's rotation, as we explained about the apparent motion of the sun. We also talked about the speed of the earth's rotation (at the equator) as being approximately 1,000 MPH. We suggested to the girls that if their parents told them to =get moving in the morning, they could accurately say "I'm already moving at 1,000 MPH".

Annalise with a small group

Bill and Annalise showing the Girls that they are moving at 1,000 MPH.

Our fourth and final station consisted of the library scope display, along with a discussion of the Jeffco observatory, Eclipse 2024 and a host of other questions that may have popped up. We estimated that 325 girls attended the event altogether, and roughly half of those were able to visit the SLAS group. We also had discussions with Cedarledge leaders, who may be calling on us to do some sort of night program for the scouts in the future.
So another satisfied customer !

Bill Biermann

Additions at the Observatory

2 SCT telescopes were donated to SLAS. The scopes are both Meade one 8” and a 10”. We have decided to relocate the scopes to Jefferson College Observatory both are setup on wheeled carts so they can be moved from the storage shed to the observing patio. SLAS members are welcome to come down and use the scopes. Contact Mark Jones for more information.

New Loaner Scope Equipment

We have added a new piece of Loaner Equipment for SLAS members. It is a Vixen 80mm diameter x 900mm FL telescope binoculars. It come with forked tripod mount and 4 sets of eyepieces providing magnifications of 36X, 45X, 60X and 100X!

Check with Mark Jones if you are interested in giving this unit a test drive! I'm betting the Pleaides would look great in this one!

Vixen BT80M-A Binocular Telescope w/tripod	43-1439598-032		Vixen 23309
		cardboard shipping box	BT80M-A has Vixen dovetail rail
		front and rear lens covers	900mm focal length
		25mm Ortho eyepieces, matched left & right	36X
		Orion Explorer II 20mm eyepieces left & right	45X
		Orion Expanse 15mm eyepieces left & right	60X
		Orion Expanse Wide-Angle 9mm eyepieces left & right	100X
		Alt-Az Fork Mount on Tripod, extendable legs	Mount has 1/4"x20 screw

St. Louis Astronomical Society
Devoted to the Interest and Advancement of the Science of Astronomy
Executive Board Meeting Minutes 12/1/2022

1. Opening Activities a. Attendance: Jim Small, Larry Campbell, Randy Harrison, Mark Jones, Brad Waller, Brent Buch b. Open Meeting; Meeting opened at 7:04 pm c. Approval of last month's meeting minutes Brad motion to approve the minutes, Randy, d. Next Board meeting date: Dates for 2023: Meetings will be via Zoom until further notice: Jan 5, Feb 2, Mar 2, Apr 6, May 4, June 1, July 6, Aug 3, Sep 7, Oct 5, Nov 2, Dec 7 SLSC Will Synder SLSC Update

2. Upcoming General Membership meeting topics: a. **Speaker**: Alan Dyer – "Getting into Astrophotography" b. Special Awards needed: perpetual coming c. Speaker Press Release: Rich Heuermann has sent out Press Release d. Special Business – None for December Budget and Special Awards to be presented. e. A101 – For January Shanna Ramirez – Astronomy for Toddlers Solstice Prizes – 2 Celestron Binocular tripod adapters; 1 Moon Filter set 1 ¼"; 1 lens cleaning kit; 2 Red Light Night Pro readers; 2 Star Date Subscriptions
Action: Brad to submit invoices for Stephen Hummel including coffee mugs and postage.
Action: Brad to ship mug to Stephen Hummel f. **Hospitality:**
Action: Larry C. to get cake at December meeting with Alan Dyer photo

3. SLAS Financial Report (as of July 31st) a. Balance Sheet: b. Profit/Loss report: c. Annual Budget meetings d. Corporate filings:

4. Speaker Committee a. Budget - $400 b. Upcoming speakers: Brad has contacted speaker for FAST waiting for response. Rich Heuermann is backup for January. Mike Malolepsy also provide lead for speaker. Carl Mathsday also provided lead for speaker.

SLAS Monthly Meeting Presentations 2022 2023

Month	Name Topic Sponsor
16-Dec-2022	Alan Dyer Getting into Astrophotography Author
20-Jan-2023	
17-Feb-2023	Haojing Yan Pushing the Redshift Frontier with JWST UM-Columbia
17-Mar-2023	
21-April-2023	Jonathan Katz Arrokoth's Necklace, Boyajian's Star Washington U.
19-May-2023	William McKinnon Missions to Jupiter's Moons Washington U.

d. Topics of interest e. Stipends f. Travel

5. Membership Initiatives a. Budget - $500, balance $380 b. Welcome Aboard Meetings – c. Raffles –d. Attendance prizes

6. Membership Recognition a. Total Budget $550, Balance $11
b. NSN Outreach Awards: January c. Membership Report: SLAS Board and Committee Members, Attached is the latest SLAS membership report showing 250 members which is five members higher than the start of the year. This is the highest count that I have seen since tracking membership. Thanks to Bill Winningham, membership renewals are much improved.
Standing Action: Bill to provide list of expiring memberships to SLAS Board and Jim for newsletter
Standing Action: Jim to display list of expiring memberships at start of Monthly General Meeting
d. Member anniversary – Astronomical League sent special letter to Thane Bopp for his 70th anniversary
Action: Larry/Jim: Need anniversary plaque design for Bopp, Melka, Davis. Budget of $20 each
e. New Award program- $600 budget 1. Special Award Committee report: Chairman – Larry Campbell, Jim Small, Mark Jones, Cook Feldman, Sharon Bertram, Fred Schovanez, Bill Neubert 2. New Award Policy and nomination process 3. Submittal deadlines 4. Nomination reviews: 5. Award selection: 6. Plaques purchased: 7. Awards presented:
Action: Jim working perpetual plaques Action: Jim to purchase to 2022 Special Award plaques for December

7. Outreach - a. Budget - $620, balance $541 b. Member Training Program Status: on hold for the time being.c. Purchase of T-shirts for volunteers completed training d. Purchase of lawn signs: none needed e. Upcoming outreach events: f. Awards/recognitions – g. NSN Outreach hours YTD: Brad requests we buy 5 more 2023 pins than we need in order to have extras. Bill Breeden has set up 2023 Francis Park dates into NSN and created flyer
Action: Jim to update website with 2023 Francis Park Events Flyer
Action: Mark to add Francis Park events to Facebook page

8. Old Business:

9. New Business: Shanna Ramirez SLAS Member Proposal **Action: Mark/Jim to add Shanna's Toddler's presentation to SLAS website**
Editing of the newsletter requires Microsoft Publisher software. Currently we have one version loaded on Jim Small's PC. This means that Jim is the only person who can edit the SLAS newsletter. Motion: Mark Jones proposes we buy a second copy so Mark can act as backup editor. The cost of the Publisher license is $159. Mark proposes this be paid for out of 2022 budget, specifically from the newsletter budget" Motion passed by Board.

10. Other Committee Reports: If needed

A. SLSC Business: a. First Friday actions – b. Other immediate business
Standing Action: Invite Will Snyder to monthly SLAS Board Meeting
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 – Dec

C. Jefferson College Business: a. Committee Meeting report: No report b. Upcoming Outreach Event: Dec 4th New fan motor cable for 16" has been ordered and received.
Action: Jim to purchase new Handbox for 10" LX200 from Meade

D. Library Telescope Committee a. Budget – $300, balance $300 b. Upcoming builds or maintenance events c. Maintenance budget - $100 d. Mileage re-imbursement – see above e. Promotional materials - $200

E. SLAS Social Events a. Budget - $300, balance $45 b. Homemade Fest - $100 budget, balance $40 c. Star-B-Q - $200 budget, balance $5 d. Promoting Dobson-Fest event on Sep 17th

Other

F. SLAS Brochures a. Budget $200, , balance $144 b. Quarter cards

G. Loaner scope Program a. Budget - $100, balance $100 b. New donations: 13.1" Coulter Blue Tube Odyssey. Sell for $150.
Action: Mark to send photos of 13.1" scope to Jim for Newsletter
c. Replacement Parts for the LPTs d. Items for sale **several:**

H. SLAS Library a. Budget - $500, balance $435 b. Other – 2023 Ottwell and RASC Handbook

I. Merchandise New coffee mug design (JCO logo, SLAS Logo) - www.startorialist.com We used Discountmugs.com in 2018
Action: Brent to email to Board for the design for Mug, for Board to review. J. Telescope Making

K. Newsletter a. Budget $600, balance $266

L. Website - a. Budget $750, balance $475|

M. Social Networking

N. Night Sky Network

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 Brad, second by Brent, meeting adjourned at 8:45pm.

St. Louis Astronomical Society
Profit & Loss Budget vs. Actual
January through December 2022

Prel

	Jan - Dec 22	Budget	$ Over Bud...
Ordinary Income/Expense			
Income			
Events Income	2,341.46		2,341.46
Magazine Subscription	3,154.95	3,468.05	(313.10)
Membership Dues	5,675.00	5,430.00	245.00
Merchandise Sales		650.00	(650.00)
Total Income	11,171.41	9,548.05	1,623.36
Cost of Goods Sold			
Magazine Subscriptions	3,141.70	3,468.05	(326.35)
Total COGS	3,141.70	3,468.05	(326.35)
Gross Profit	8,029.71	6,080.00	1,949.71
Expense			
1-Programs & Events	2,674.64	3,790.00	(1,115.36)
2-Newsletter	527.04	600.00	(72.96)
3-Library expense	491.67	500.00	(8.33)
4-Astronomical League Dues	1,105.00	945.00	160.00
5-Loaner Scopes	247.40		
6-Brochures	56.35	600.00	(543.65)
7-Insurance	1,049.50	1,050.00	(0.50)
8-Website	335.24	750.00	(414.76)
9-Administrative Expenses	3,569.27	3,834.80	(265.53)
Jefferson College Observat...	174.91		
Total Expense	10,231.02	12,069.80	(1,838.78)
Net Ordinary Income	(2,201.31)	(5,989.80)	3,788.49
Other Income/Expense			
Other Income			
Donations	1,452.45		1,452.45
Interest Income	24.91	50.00	(25.09)
LTP Receipts	3,135.87		3,135.87
Non-Operating Income	1,749.46		
Proceeds from Lens Sales	3,603.69		
Total Other Income	9,966.38	50.00	9,916.38
Other Expense			
LTP Disbursements	1,425.04		1,425.04
Total Other Expense	1,425.04		1,425.04
Net Other Income	8,541.34	50.00	8,491.34
Net Income	**6,340.03**	**(5,939.80)**	**12,279.83**

St. Louis Astronomical Society
Balance Sheet
As of December 31, 2022

	Dec 31, 21	Dec 31, 22
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	7,447.09	16,863.65
Deposit, Certificate of	15,952.97	15,974.47
Library Telescope Escrow	797.00	2,459.77
PayPal	705.80	494.39
Savings - First Bank	41,149.86	41,153.27
Total Checking/Savings	66,052.72	76,945.55
Other Current Assets	2,675.61	675.61
Total Current Assets	68,728.33	77,621.16
Fixed Assets	15,783.04	12,460.24
TOTAL ASSETS	**84,511.37**	**90,081.40**
LIABILITIES & EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable	770.00	0.00
Total Current Liabilities	770.00	0.00
Total Liabilities	770.00	0.00
Equity		
Opening Bal Equity	8,497.66	8,497.66
Retained Earnings	74,279.95	75,243.71
Net Income	963.76	6,340.03
Total Equity	83,741.37	90,081.40
TOTAL LIABILITIES & EQUITY	**84,511.37**	**90,081.40**

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: 2/2, 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 Dec 17

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. 2/5, 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: 1/27, 2/10, 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:

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

January

20 Fri	SLAS Regular Meeting
21 Sat	SLAS Dark Sky at Danville
21 Sat	SLAS Dark Sky at Jefferson College

February

2 Thur	SLAS Board Meeting
5 Sun	Aim for the Stars
12 Sun	SLAS Sky Orienteering Babler
16 Thur	Incarnate Word
17 Fri	SLAS Regular Meeting
18 Sat	Homemade Fest
18 Sat	SLAS Dark Sky at Danville
18 Sat	SLAS Dark Sky at Jefferson College
27 Mon	Eureka Hills Library

March

2 Thur	SLAS Board Meeting
2 Thur	Natural Bridge Library
5 Sun	Aim for the Stars
6 Mon	Mid-County Library
15 Wed	SIUE Lifelong Learning Speaker
17 Thur	SLAS Regular Meeting
18 Sat	SLAS Dark Sky at Danville
18 Sat	SLAS Dark Sky at Jefferson College
22 Wed	Bluebird Park
28 Tue	Festus Public Library
30 Thur	LaSalle Springs
30 Thur	Samuel C. Sachs Library

April

2 Sun	Aim for the Stars
6 Thur	SLAS Board Meeting
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!

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 $_____

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:

Tom Nickelson 314-346-9565
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

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

COMMITTEE CHAIRS

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

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librarian at slasonline.org

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Devoted to the Interest and Advancement of the Science of Astronomy

ST. LOUIS ASTRONOMICAL SOCIETY

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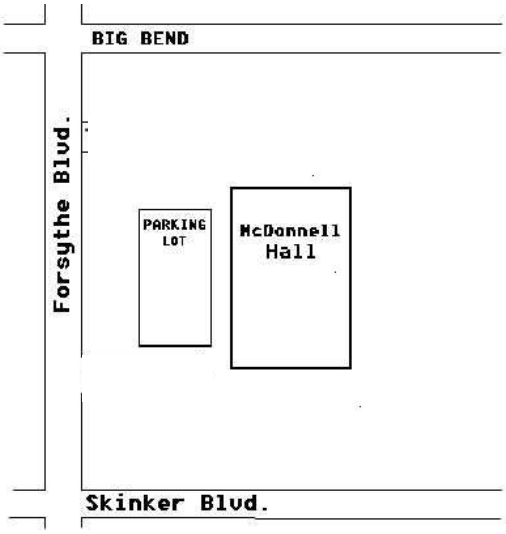
Who We Are and What We Do

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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