THE EVENT HORIZON

ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

VOLUME 34, Issue 9
September, 2024

Who Actually Discovered That the Universe Is Expanding?

by

Dr. Joseph Marcus
St. Louis Astronomical Society,

Dr. Joseph Marcus of the St. Louis Astronomical Society will be featured at the September meeting of the Saint Louis Astronomical Society.

It is often wrongly thought that it was Edwin Hubble (1889-1953) who discovered the expansion of the universe in 1929. It was not. The discovery of the expansion, in 1914, was crucial to our understanding of the universe. It led to the "Big Bang" theory of cosmic origin in the 1930s, its confirmation in the 1960s, our present headaches over the value of the "Hubble constant," and our theories of the role of dark matter and dark energy in the fate of the universe. In this talk Dr. Marcus will recount the 1914 discovery, its discoverer, and Hubble's jealous part in the subsequent story of the discovery of the expansion. In 2018, the International Astronomical Union (IAU) renamed the "Hubble law" the "Hubble -Lemaître law" to honor George Lemaître (1894-1966) for his application of Einstein's general relativity theory to predict the cosmic expansion and the Big Bang. There is still some controversy over how the expansion "Law" and the "Hubble constant" should be named. The IAU may resolve the issue during its 2027 conference.

Dr. Joseph Marcus is a retired pathologist and veteran amateur astronomer with particular interest in comets. He edited the internationally circulated Comet News Service, based at the McDonnell Planetarium in Forest Park, between 1975 and 1986. He has continued his comet research and disseminated results in numerous scientific journals.

Upcoming meetings:
September: Joseph Marcus, MD, ""Who Discovered the Expanding Universe? Spoiler: Not Hubble!"
October Pamela Gay, PhD, "Secret Squirrel Stuff", Planetary Science Institute
November: Robert Zubrin, PhD. "The Case for Mars"; The Mars Society
December 2024: Robert Reeves; "Postcards from the Moon"; LPOD Harvard University
January 2025: Bhupal Dev, PhD "Finding New Physics in Debris from Colliding Neutron Stars" Wash U
Fabruary 2025: K Michael Malolepszy "Probing the Sub-Microwave Universe Part III" SLAS

September 20 Meeting will be In Person and Online!

The meeting will begin at 7:30 PM Friday, September 20 in **McDonnell Hall 162** on the Danforth campus of Washington University. McDonnell Hall is accessible from Forsyth Boulevard via Tolman Way. Free yellow zone and garage parking spaces are available.
The event will also be available via Zoom online conference per the link here:

To join with computer or smartphone: use the below link.
https://us02web.zoom.us/j/8604505790?omn=81638555826

Note: The zoom room will be open at 7:00 pm for socializing, but the meeting will still start at 7:30 pm

Bright Prospects for Comet C/2023 A3 (Tsuchinshan-ATLAS) How to find the comet... page 2

2024 Robert M. Walker Distinguished Lectures: Public Lecture with Harold Levison on Traveling with Lucy on the First Ever Mission to the Trojan Asteroids - October 17 - Page 3

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President's Corner
by Jim Small

Joe Marcus has prepared a good talk for us for the September meeting. Even better, after the talk, he will tell us all about the upcoming Tsuchinshan-ATLAS comet which is predicted to be very bright in the very near future. Joe will tell us what to expect and when and where to find it. Get your cameras ready!

I attended the Dobson-Fest over in Carlyle Lake last Saturday and it was a pretty good time. It was threatening rain, but that never happened and we ended up enjoying the pop-ups for shade instead. Lots of booths to visit including several on telescopes, the Moon and even amateur radio astronomy. A 30 inch Obsession was present although I didn't look through it… clouds had taken over by evening. Mark Jones said he looked at Alcor/Mizar through it and was very impressed with the split for Mizar. They had a food truck there as well. Pretty good pulled pork sandwich! Visitors were limited, but that just improved your odds of winning the 8" or 10" telescopes that were the grand prizes. About 95 people attended.

I was going to head for the observatory for the eclipse, but it turned out it was easily visible right outside my door! So I had fun firing up the DSLR right there in my front. A set of pics are found later in the newsletter. I also had some photos from Mark Jones and Randy Harrison. I found that if I used a longer exporsure that overexposed the Moon, less detail was visible on the surface of the Moon, but the shadow of the Earth on the Moon was much more precise.

We will be celebrating the 10th anniversary of the Library Telescope program with several St Louis County libraries. Look for the article elsewhere in the newsletter and sign up to work these events. They are likely to be pretty crowded so we could use the help!

MSRAL 2025 has been planned for June 13-15 in Little Rock, AK. A newsletter for the region has been written which addresses some important issues. An announcement and a link for the newsletter will be sent to the membership. Look for it over the weekend. Be sure to read it!

See you at the meeting Friday night!

Sincerely, |
Jim Small

SLAS Memberships Expiring in September

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

SLAS Memberships Expiring in October

David	Adkins
Bob	Beebe
Nina	Bhayani
Larry W.	Campbell-
Wayne & Nancy	Clark
Daniel L.	Corso
Jennifer	Dove
John	Duchek
Donald E.	Ficken
Murray	Fishman
Pete	Gaska
Em	Hargrave
Zachary	Jakuboski-
Joe & Margie	Marcus
William	McCarthy
Rick	Nichols
Faith	Simons
Randall	Sommers

Bright Prospects for Comet C/2023 A3 (Tsuchinshan-ATLAS)
by Joe Marcus, SLAS

This remote, apparently asteroidal object, discovered 2023 Jan. 9 UT at the Purple Mountain Observatory (Tsuchinshan) in China, shortly afterwards was found to have cometary activity on Feb. 22 UT of last year by the Asteroid Terrestrial-Impact Last Alert System (ATLAS) search program in South Africa. The orbit computed then showed that the comet would dive deep into the inner solar system a year and a half later, reaching perihelion (closest approach to the Sun) at a distance 0.39 au –Mercury's average Sun distance – next week on Sept. 27.73 UT.

Not only does such a close solar encounter allow the comet to become bright due to the intense heating that spews dust off its surface, but the comet passes nearly between the earth and the sun at an extremely small scattering angle q of 7.0° (i.e., a very large phase angle of 173.0°) on Oct. 9.4 UT. Around this time the comet will experience an extreme brightness surge of nearly -7 magnitudes (!) due to intense forward-scattering of sunlight in our direction by the micron- to submillimeter-size comet dust grains in the comet's coma and tail.

There was a major scare in early July when the eminent comet scientist Zdenek Sekanina, retired from JPL, posted a paper on the arXiv preprint server that asserted that the comet was in the process of disintegrating. However, observations through early-mid August showed no sign of deterioration before it became lost in the solar glare at superior conjunction. Last week it emerged low in the morning sky. Observations from the Southern Hemisphere placed it at a healthy 4th magnitude.

I have analyzed the visual magnitude reports in the online "COBS" database from the beginning of the year to the present, and find that C/2023 A3 has a very decent "absolute magnitude", H_0, of about 6.0, and that it has been brightening steadily at the average rate for comets, as an inverse 3.2 power of its distance, r, from the Sun.

My brightness forecast for the next month accounts for the extreme brightness enhancement expected due to intense forward-scattering. It can be found in Bob King's Sept. 10 column posted here on the *Sky & Telescope* website: https://skyandtelescope.org/astronomy-news/update-comet-tsuchinshan-atlas-might-outshine-predictions/.

Here I've provided two Figures that show the comet's path as an offset from the Sun in R.A. and Declination. In the first Figure, the approximate morning and evening horizons are drawn in for the times of nautical twilight, when the Sun is 12° below the horizon, for

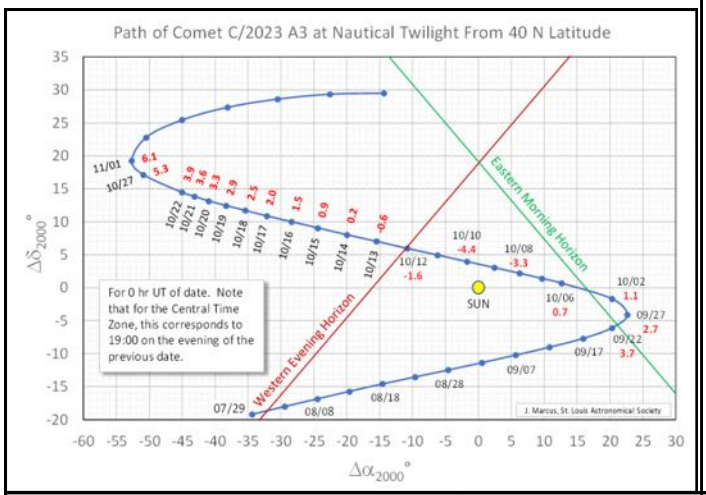
(Continued on page 3)

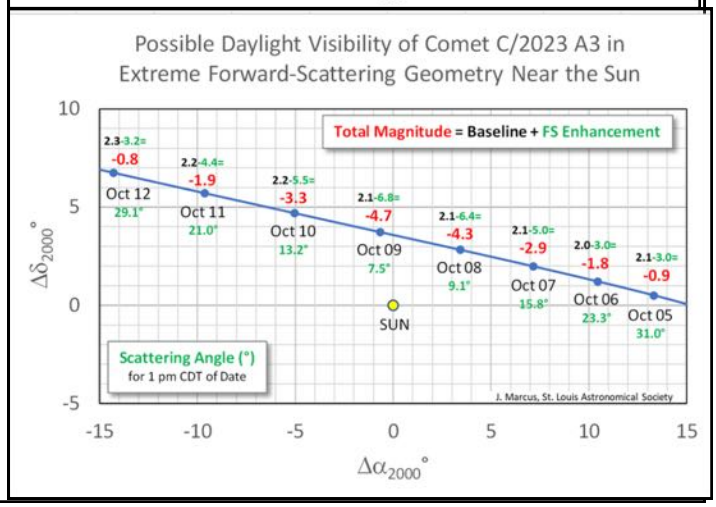
(Continued from page 2)

40° north latitude. North is at the top. You can see that the comet will be marginally visible with difficulty very low near the eastern morning horizon beginning next week as it brightens from 3rd to 1st magnitude. It then zags rapidly toward the Sun at the beginning of October, passing inferior conjunction on Oct. 9 to emerge in the evening sky on the evening of Oct. 11 in our Central time zone (Oct. 12.0 UT), rapidly climbing on each successive evening. My predicted magnitudes, derived from the baseline magnitude and the added forward-scattering brightness boost, are shown in red. If the forecast holds, through mid-late October you probably won't need a star chart to locate the comet.

The second Figure shows the eastward path of the comet in the daylight sky for 1 p.m. Central time for each indicated day. Under each date is the scattering angle (in green), and above each position is my predicted total magnitude (in red), which is the sum of the baseline magnitude (in black) and the forward-scattering magnitude boost (in green). At magnitudes -4.3 and -4.7 – the brightness of Venus – on Oct. 8 and 9, it is quite possible that the comet may be visible in daylight, if the Sun is *safely* hidden behind a building. I doubt that the comet will be visible by naked eye, but small binoculars and telescopes may enable a sighting. Daylight comets are very rare, every two decades or so on average. The last daylight comet was C/2006 P1 (McNaught) in January, 2007 when it reached small scattering angles. That comet was intrinsically brighter (H_0 around 4), and it ventured much closer to the Sun around that time (0.171 au). Daylight sightings were reported over a 6-day interval centered on the comet's minimum scattering angle (31°) (see http://www.icq.eps.harvard.edu/marcus_icq29_119.pdf).

Comets will be comets, so this magnitude forecast could easily be off a half-magnitude or magnitude either way. Good luck in your observations. If you attempt daylight sightings, exercise extreme caution to protect your eyesight.





St. Louis County Library Celebrates 10 Years of Telescope Lending Program

by

Don Ficken

St. Louis, MO–St. Louis County Library (SLCL) is celebrating the 10-year anniversary of its telescope lending program with a series of Star Parties this fall. SLCL began circulating telescopes in October 2014 in partnership with the St. Louis Astronomical Society. The program was an immediate success–to date telescopes have been checked out over 3,850 times. The collection began with 10 telescopes, and has expanded to 61 scopes due to popular demand.

To celebrate the anniversary, SLCL and the St. Louis Astronomical Society are planning a series of Star Parties. The events will include free telescope training and the opportunity to view the night sky. Space-themed snacks including cosmic brownies, moon pies, Star Crunch and Milky Way will be provided.

Star Party Schedule:

Wednesday, October 9, 6:30 p.m. | Samuel C. Sachs

Thursday, October 10, 6:30 p.m. | Eureka Hills

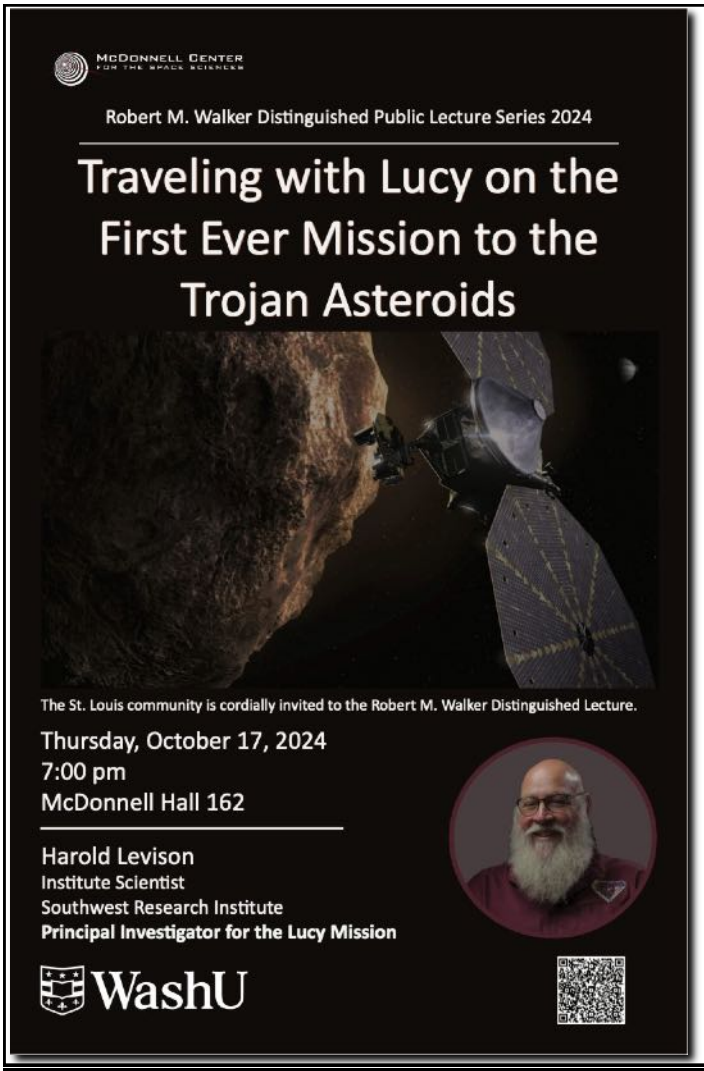
Thursday, November 7, 6:30 p.m. | Oak Bend

Thursday, November 7, 6:30 p.m. | Prairie Commons

To sign up for one of the free Star Parties, please visit www.slcl.org/events.

Telescopes are part of SLCL's Library of Things, a unique collection of non-traditional library materials including pickleball kits,wifi hotspots, musical instruments, portable projectors, fishing equipment, games, kits, puzzles and more – all available to check out for free with a library card.

Program sites are accessible. Upon two weeks' notice, accommodations will be made for persons with disabilities. Contact St. Louis County Library by phone 314-994-3300 or visit www.slcl.org.



From Brad Joliff:

I am pleased to inform you that Dr. Hal Levison, Southwest Research Institute and Principal Investigator of the Lucy mission to tour Jupiter Trojan asteroids will serve as the 2024 Walker Distinguished Lecturer on October 17, 2024.

Dr. Levison's principal research interests lie in the dynamics of astronomical objects. In particular, he focuses on the formation and long-term behavior of solar system bodies. Dr. Levison's work includes studies of the formation of both giant and terrestrial planets, the long-term dynamical behavior of comets, the dynamics of objects in the Kuiper belt, the origin and stability of Trojan asteroids, and the formation of satellites.

Public Lecture - Thursday, October 17: 7:00 pm, McDonnell 162

Traveling with Lucy on the First Ever Mission to the Trojan Asteroids!

Sincerely,

Bradley L. Jolliff
Scott Rudolph Professor of Earth, Environmental, and Planetary Sciences
Director, McDonnell Center for the Space Sciences
Washington University in St. Louis

One Good Thing

Welcome to One Good Thing. This section will appear periodically in our newsletter, and is intended to recognize the "onesies and twosies" actions of members that sometimes go unnoticed. Membership is encouraged to recognize fellow members by submitting to Recognition@SLASonline.org.

I would like to acknowledge the following members:

Ty Frauenfelder for his continued work at modernizing the Jefferson College Observatory. Recelntly Ty updated the software on the 16" telescope, and he was able to show me how he can now control the telescope through Stellarium. Also using the camera on the 80mm guidescope, Ty is able to do "plate-solving" which help refine the accuracy of pointing the 16".

John Duchek has recently donated a laptop to keep at the observatory. This laptop is being used by Ty Frauenfelder to control the telescope and cameras.

Carl "Buz" McCoullough for his efforts to integrate the Truman State (TSU) all-sky camera and dark-sky photometer into the Jefferson College (JC) WIFI system. Bus has been making cables and hardware for the TSU equipment, coordinating with JC IT department. This effort has been going on for a month and will take more hours of work by Buz. Once completed we should be able to collect nightly all-sky images and sky brightness data.

Don Ficken for his efforts to find a supplier of library telescopes. For 10 years we have been buying telescopes for the Library Telescope Program from Orion Telescopes and Zhumell Telescopes. Orion and Zhumell are out of business. Don is working with a several companies to get a new supplier to take commercial production.

Bill Biermann, John Duchek, Michael Hoke, Buz McCoullough and Don Ficken for the Arnold Library "Kids Time: Telescope Science Star Party", on August 13th. Therse members brought science displays and showed the kids how to use the library telescope.

Bill Biermann for presenting the A101 at the August SLAS meeting. Bill presented on "How to Interpret Aurora Forecasts"

Chris Hansen for volunteering to take SLAS' 40mm Coronado H-alpha telescope and use it for Solar Outreach.

Rick Menedez for putting together the Astro Quiz at the August 3rd Star-B-Q

Mike Boelter for volunteering to help a local amateur on how to use his Nexstar 6 telescope. Mike invited them down to Jefferson College on night and they both setup their scopes and used them. They both learned a lot

Mike Boelter for volunteering to help Jefferson College set up their weather station

Steve Sands (former SLAS member) for evaluating the Coronado 40mm and 90mm telescopes recently donated to SLAS. Steve is a local expert on h-alpha telescopes and determined the 40mm is in good shape to use, but the 90mm scope has a deterioration in the blocking filter, this will need to be replaced.

I would also like to acknowledge the following members who contributed to the SLAS Facebook page, since July 2024. Here members post their photos, and post astro news items. Thanks to: Jesus A Ponce de Leon, Mary Barteau, Dennis Latinette, Randy Harrison, and Kevin Adkins.

MSRAL 2025 Mark Your Calendar Now!

MSRAL 2025 will be held in Little Rock. AK at the University of Little Rock. It is sponsored by the Central Arkansas Astronomical Society.

It will be held **June 13-15, 2024**

Some of the highlights will be:
A 24" dobsonian,
Atalk by William Hartcoff who is retired from Naval Observatory
A celebration of the 150th anniversary of 26" Refractor
Kent Martz on refurbishing a 19" refractor from 1861
Greg Lofland, Yale professor of astronomy on how amateur astronomers can help monitor exoplanets,
Presentation by the Science museum science guy from tonight show
A visit to the Clinton Library
Lots of downtown to explore

Looks like it will be a fun and interesting event. I know I will be making plans to attend! More information to come down the line.

Were you able to see the partial lunar eclipse on Tuesday, September 17? Here are some views people sent in.

Above: Randy Harrison sent in this photo taken from Illinois

Left: Mark Jones took this photo using the cameras on the refractor riding on the 16" at the Jefferson College Observatory.

Below: Sequence of the eclipse by Jim Small using a Nikon D750 and 150-600mm zoom lens.

Times In order from left to right:

9:40pm 10:02pm 10:10pm 10:13pm 10:15pm

A longer exposure was used which washed out the details on most of the surface but made the shadow of the eclipse more precise.

Left: A sampling of the booths for Dobsonfest, hosted by the RiverBend astronomy group this year at Carlyle lake. There was a food truck, and booths for just about any aspect of astronomy, including dobsonian telescopes, library telescopes, the Moon, Radio astronomy, equipment sales (Lookin' Up Optics) and much more!

For Sale by SLAS

Price reduced to $500 from $800- The following item was donated to the St Louis Astronomical Society. Compares to C-8 and accessories that sell new for $1780.

Celestron 8" SCT Black Tube, Vixen rail, Starbright Coatings, Faststar Compatible, Model #11023-1. New sells for $1350. https://tinyurl.com/5duzk2pt

Celestron Visual Back 1 1/4". New sells for $45. https://tinyurl.com/mrycw4br

JMI MotoFocus for C-8, New sells for $200. https://tinyurl.com/3778frvx

Orion FlexiShield, dew shield. News sells for $44. https://tinyurl.com/2ey7a2az

Rubbermaid Tool Box, Grey/Black 34" x 12" x 15", foam pieces. New sells for $100. https://tinyurl.com/2z5czk87

Contact Mark Jones or Jim Small if you are interested in either scope. Phone numbers and email addresses at the back of the newsletter!

Meade DS-2130 130mm reflector Price = $150

Single arm go to mount with 497 controller. 130mm FL=1000mm. Comes with one eyepiece, tripod mount and accessory tray.

Mint condition. Never been used. Don Dicken powered it on to test it. Can run on external power either battery or ac adapter (12volt).

If you don't like the design of the scope, another scope 5" or smaller could be placed in the rings that hold the scope, just need to make an adapter.

Eastern Iowa Star Party
by
Robert Mitchell

The Quad Cities Astronomical Society is hosting its annual Eastern Iowa Star Party on two weekends this year, August 30-31 and September 27-28, at the Menke Observatory, located at the Wapsi River Environmental Education Center near Dixon, Iowa. No fee required and no registration form needed, but space is available first come, first serve, so please RSVP soon at the below email address with the following information:
Robert Mitchell rcm1970@msn.com
1. Which weekend will you be attending? Aug 30-31, Sept 27-28, or both?
2. Will you need electricity?
3. Do you plan on doing astrophotography, visual, or both?
Be sure to check out the observatory's new roll-off building!
Robert Mitchell President, QCAS

For Sale
by
Jim Small

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

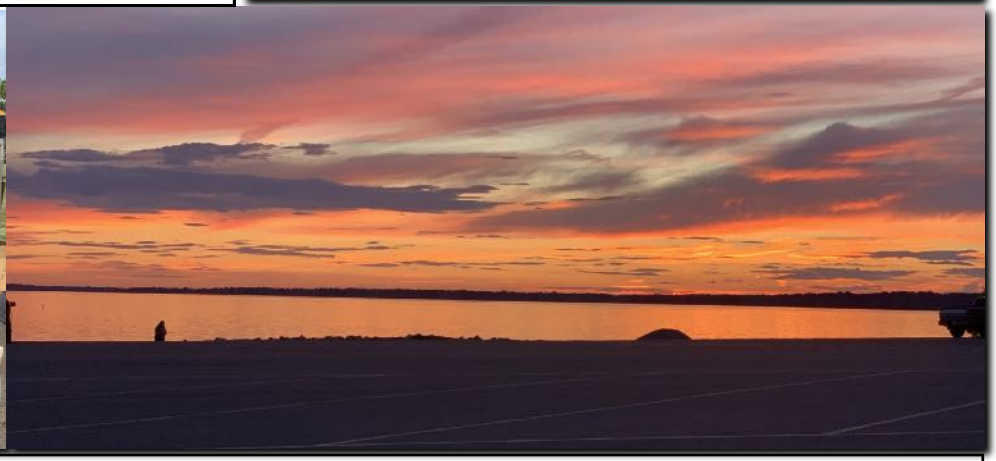
1. Nikon Lenses. 200mm, 70-200mm zoom.

2. Case for cameras and lenses make an offer

3. Stellarvue travel tripod and M2 alt-az mount. Beefy mount that will handle any scope you want to attach to it. Smooth action. Very sturdy tripod. $300

4. Meade ETX LS 6" with wifi controller. EXCELLENT optics. Autostar III controller not working. Have compatible SkyFi wifi controller that will substitute. Working on getting it operational. Optical tube alone is worth it. $650

Photos from Dobsonfest 2024.
Nice scenic site right on Carlyle Lake.



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

1. Opening Activities: a. Attendance: Jim Small, Brent Buch, Mark Jones, Dennis Latinette, Bill Winningham, Brad Waller b. Open Meeting: Meeting called to order, 7:05pm c. Approval of last month's minutes. July minutes approved. d. Next Board meeting date: 9/5, 10/3, 11/7, 12/5 Meetings will be via Zoom until further notice: Action: Plan 10th anniversary for LTP at October SLAS meeting. Maybe A101 (J. Small) and cake (D. Latinette) Standing Action: SLSC Report by Will Snyder

2. Upcoming General Membership meeting topics: a. Speaker: Bradley Tsalyuk, Space Shuttle Endeavour Exhibit b. Schedule room at Wash U. Back in McDonnell Hall. Action: Jim to check on McDonnell Hall for September meeting Action: Jim bring portable speaker for meeting needed for McDonnell Hall starting July meeting. Status: McDonnell hall has new podium and sound system. Worked well for July meeting. Action can be closed c. Who is recording meeting? Brent d. Special Awards needed Handout leftover Anniv and Outreach certificates e. Speaker Press Release and social media: Went out today f. Special Business – None g. Announcements: Dobsonfest, Missouri Dark Sky A101 – Aurora predictions and what they mean (Jim Small) A101 for September – Joe Marcus to speak on Comet Tsuchinshan-ATLAS A101 for October – Brad Waller 2024 Star Trek Convention A101 for November – Mark Jones, How to select a good first telescope f. Hospitality: a. Budget – 2024 Budget $360, balance $251 Action: Dennis to buy diet soda for July meeting. Diet soda purchased, action closed

3. SLAS Financial Report a. Balance Sheet: Total Assets: $84.4K, cash: $76.9K b. Profit/Loss report: Scope sales $580, Dues: $595; Donation $690, Interest: $673; Net loss: $1500 vs Budget loss of $3486 c. Annual Budget meetings: start in September d. State Corporate filings: 2024 Budget: $20, paid in even years only, not due until August 2024. Federal Form 990 due May 15th, this form was submitted on 5-15-24. e. Insurance: typically, due in May each year f. Astro League Dues: 2024 Budget: $1070, AL sends invoice around July Bill cannot access old Astronomy magazine subscriptions, only new subscriptions. Action: Post link on Paypal page, renewal letters, brochures, newsletter, etc. Bill to draft wording and send to Board Action: change current price of Astronomy Magazine $34 to $40 in newsletter (Jim S), brochures (Jim S.) and website PayPal (Bill). Action no longer necessary, SLAS will no longer process renewnals for magazines, see action above. This action closed

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

SLAS Monthly Meeting Presentations 2024

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

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

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

5. Membership Initiatives a. Budget – 2024 Budget $600, Balance $300 Standing Action: Mark Jones will send out member orientation materials when member joins. Also, schedule monthly member chat meetings are held via Zoom on the Thursday after the general meeting. c. Raffles – not planned d. Attendance prizes – In-person and virtual members will be eligible for attendance prizes in 2024.

(Continued on page 8)

(Continued from page 7)

6. Membership Recognition a. Total Budget 2024 Budget $500, Balance $456 b. NSN Outreach Awards: Awards made in Feb each year c. Membership Report: SLAS membership report for July 2024. We had 241 members at the end of July 2024. We gained 16 members this year with all of the increase from family memberships. d. Member anniversary – Next event is November meeting e. Special Award program - 1. Special Award Committee report: Chairman: Bill Biermann. Next committee meeting is August 15th Action: Mark Jones to make update website with new wording that was approved by Special Awards Committee. Status: Mark updated website on 8-4-2024. Action can be closed. 2. Special Award deadlines: Current Nomination deadline is Sept 1st 3. Nomination reviews: by October 1st 4. Award selection: selections made in November 5. Awards presented at December meeting –

7. Outreach - a. Budget – 2024 Budget $500, Balance $250 b. Member Training Program Status: c. Purchase of T-shirts for volunteers completed training per budget: Action; Mark need T-shirt design. Mary and Joe Barteau volunteered to come up with T-shirt designs. Slideshow of examples sent to Board on 10-31-23. Action remains open until final design selected. Board preferred Safety Green in style #3 is preferred by Board Do they have t-shirt in a Tall/long? d. Purchase signs for outreach per budget: e. Upcoming outreach events: As of May 28th, we have 61 events scheduled for rest of 2024 Gateway Arch - August 10 (Saturday), September 13 (Friday), Oct 18 (Friday) Francis Park – September 11, October 9 Tower Grove Park – Aug 10, Sep 14, Oct 12 DobsonFest – Sep 14 hosted by Riverbend Astronomy Club First Friday –None in May, June 7. Events for July-Dec still being finalized Solar Sunday –8/11, 8/18, 8/25, 9/1 Action: Mark to add Dobsonfest including details for location and times to NSN calendar and solicit volunteers. Committee meeting held July 8th. Randy has meeting RBAC on Sat July 13th. Status: Mark updated NSN event on 7-23-2024. Action can be closed. f. Awards/ recognitions – g. NSN Outreach hours: Total Hours Reported in NSN: 732 hours as of Aug 1, 2024

8. Old Business: A. Discuss issues with volunteers for star parties. Perhaps appoint a coordinator whose main job is to insure we have adequate number of members in the volunteer pool for events. Discuss methods to encourage members to volunteer for star parties. Try to find out why people aren't volunteering. Come up with an action for this issue. Coordinator Meeting Report: We increased the number of NSN coordinators from 12 to 20, and we held a meeting (1/31/24) to discuss how to get more volunteers. Decision was made to create a call list and call each member an ask them if they wish volunteer. Timeline: final Script by 2-11-24; final Email by 2-14-24; final Call list by 2-23-24; calls made: starting 2-23-24 end call by 3-10-24. Action: Mark to send call list to the NSN coordinators. Close action and replace with action below Action: Make part of monthly agenda to solicit volunteers at each SLAS meeting showing upcoming events needing volunteers. Put at top of the agenda, BEFORE main speaker.

9. New Business

10. Other Committee Reports: If needed

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

B. SLCL Business a. Annual contract – No contract yet for 2024. b. Upcoming events – see calendar, we have 7 events planned for remainder of 2024

Library Telescope Maintenance Day	2024-08-10
St Louis County Library: After Hours Family Campout	2024-08-23
Lewis & Clark Library (LTP)	2024-09-10
Jamestown Bluffs Library (LTP)	2024-09-11
Samuel Sachs Library (LTP)	2024-10-09
Eureka Hills Library (LTP)	2024-10-10
Prairie Commons Library (LTP)	2024-11-07
Oak Bend Library (LTP)	2024-11-07

C. Jefferson College Business: a. Committee Meeting report: next meeting scheduled for Aug 15 at 11am. b. Upcoming Outreach Event: JCO –Aug 17, Sept 14, Oct 10, Nov 16 Mark purchased ($10.41) and replaced toggle switch to rotate dome.

D. Library Telescope Committee a. Budget – 2024 Budget none requested, expenses will be covered by escrow balance of $1836 b. Upcoming builds or maintenance events – Next maintenance event is Aug 10, 9am c. Maintenance budget – none requested d. Mileage re-imbursement – see above e. Promotional materials - none requested

E. SLAS Social Events a. Budget – 2024 Budget $390, Balance $ 254 b. Homemade Fest - 2024 Budget $150. Balance $13.81 c. Star-B-Q – 2024 Budget, $240, Balance $ 240 Report: Star-B-Q 2024 was held August 3, 2024 at Stacy Park in Olivette. 25 members and family attended. Amount spent was $237.85

Other

F. SLAS Brochures a. Budget 2024 $600, Balance $300 500 new SLAS Brochures printed, Brad has picked up from printer. b. Quarter cards – YTD 1500 cards printed. Quartercard artwork updated to add "In memory of Capt. James M. Moody" Report:

G. Loaner scope Program a. Budget – 2024 Budget $100, Balance $88 The following parts were purchased: - $20, dust cap, focus knobs, and plastic tripod replacement fittings to repair scopes recently donated - $23.39, Guiding Scope Ring Kit for Telescope Tube Diameter 50mm-80mm Astrophotography - $12.95, Widened flat Dovetail Clamp Finder Scope Base Mount Astronomical Telescope Accessory - $16.45, Dovetail Mounting Plate Metal for Astronomical Telescope 100/300/400mm Black Coronado MaxScope 40 – 4" long Vixen dovetail mounted to scope. Scope loaned to Chris Hansen for public outreach AstroScan – replaced missing focus knobs and dust cover. Scope is ready for loaner program or sale Coronado SolarMax 90mm Telescope, single stack – Scope has deteriorated internal blocking filter inside the BF15. New BF15 will cost $780 from Woodland Hills Camera. There is a French company that sells replacement filter, that we can install for 181 euros. Mark is working to place that order and make repair. b. New donations: c. Replacement Parts for the LTPs - d. Items for sale several: SOLD - Meade Polaris Model 114EQ-D / D=114mm, F=900mm, f/8 reflecting telescope and Orion 180mm Maksutov-Cassegrain Telescope with EQ mount sold for $800 For Sale $750 - Celestron 8" SCT Black Tube, Vixen rail, Starbright Coatings, Faststar Compatible, Model #11023-1. Celestron Visual Back 1 1/4". JMI MotoFocus for C-8. Orion FlexiShield, dew shield. News sells for $44. Rubbermaid Tool Box, Grey/Black 34" x 12" x 15".

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

I. Merchandise Budget – 2024 Budget $100, balance $100 36 of the new coffee mug design are ready for sale to members. $10 each or two for $15

J. Telescope Making

K. Newsletter a. Budget 2024 $600, Balance $180 (postage+toner)

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

M. Social Media Platforms: Facebook Private (https://www.facebook.com/groups/slasonline): 79 members Facebook Public (https://www.facebook.com/stlastro): 3236 followers Twitter (https://twitter.com/stlastro) : 217 followers Instagram (https://www.instagram.com/stlouisastro/) : TikTok (https://www.tiktok.com/@stlouisastro?): LinkedIn (https://www.linkedin.com/groups/14251117/): YouTube (https://www.youtube.com/channel/UC6xO5niZnSeeOUSmp5PRz4A): Helpdesk – Using the contact-us form on our website (https://www.slasonline.org/contact-us), visitors can ask questions of SLAS. These requests are automatically forwarded to the contactus@slasonline.org and given a sequential "submission #". Submission #1 was received around 12-1-2022. By 12-27-2023 we had received submission #175. As of 8-4-2024 we had received submission #409.

N. Night Sky Network

O. SLASdialogs (part of Website Budget) SLAS Groups.io – 145 members, Annual $110 account fee is due in January each year

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

Q. Observing Programs

R. Star Parties Donation:

11. Closing Activities: Motion to adjourn meeting by Brad second by Mark. Meeting adjourned at 9:11pm

Profit & Loss Budget vs. Actual
January through August 2024

	Jan - Aug 24	Budget	$ Over Bud...
Ordinary Income/Expense			
Income			
Events Income	1,303.59	250.00	1,053.59
Magazine Subscription	1,908.50	1,648.65	259.85
Membership Dues	3,230.00	3,095.00	135.00
Total Income	6,442.09	4,993.65	1,448.44
Cost of Goods Sold	1,296.94	1,648.65	(351.71)
Gross Profit	5,145.15	3,345.00	1,800.15
Expense			
1-Programs & Events	1,847.87	2,390.00	(542.13)
2-Newsletter	617.50	400.00	217.50
3-Library expense		100.00	(100.00)
4-Astronomical League Dues	1,228.00		1,228.00
5-Loaner Scopes	141.97	75.00	66.97
6-Brochures	460.40	400.00	60.40
7-Insurance	1,163.09	1,165.00	(1.91)
8-Website	588.25	400.00	188.25
9-Administrative Expenses	2,318.12	2,585.20	(267.08)
Jefferson College Observat...	179.87		179.87
Total Expense	8,545.07	7,515.20	1,029.87
Net Ordinary Income	(3,399.92)	(4,170.20)	770.28
Other Income/Expense			
Other Income			
Donations	790.00		790.00
Interest Income	988.20	35.00	953.20
LTP Receipts	786.25		786.25
Total Other Income	2,564.45	35.00	2,529.45
Other Expense			
LTP Disbursements	1,187.14		1,187.14
Total Other Expense	1,187.14		1,187.14
Net Other Income	1,377.31	35.00	1,342.31
Net Income	(2,022.61)	(4,135.20)	2,112.59

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

	Dec 31, 23	Aug 31, 24
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	12,072.69	9,890.91
Deposit, Certificate of	16,000.89	46,988.09
Library Telescope Escrow	1,964.87	1,563.98
PayPal	152.96	2,050.68
Savings - First Bank	43,138.18	13,139.18
SLAS Eclipse Conference Escr...	2,580.32	2,580.32
Total Checking/Savings	75,909.91	76,213.16
Other Current Assets		
Inventory Asset	841.87	781.21
Undeposited Funds	75.00	25.00
Total Other Current Assets	916.87	806.21
Total Current Assets	76,826.78	77,019.37
Fixed Assets	9,137.44	6,922.24
TOTAL ASSETS	**85,964.22**	**83,941.61**
LIABILITIES & EQUITY		
Equity		
Opening Bal Equity	8,497.66	8,497.66
Retained Earnings	81,754.13	77,466.56
Net Income	(4,287.57)	(2,022.61)
Total Equity	85,964.22	83,941.61
TOTAL LIABILITIES & EQUITY	**85,964.22**	**83,941.61**

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 10/3, 11/7, 12/5

SLAS Dark Sky Observing Dates All dates on Saturdays 9/28, 10/5, 10/26, 11/2, 11/30, 12/28

Francis Park Events: These events are on Wednesdays of the week nearest the first quarter Moon 10/9

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

Stargazing at the Arch Events for the public held at the Gateway Arch 10/18

Sky Orienteering Events For members who want to gather and do some relaxed observing at Babler State Park (BSP) or at the Jefferson College Observatory (JCO) Please RSVP if you plan to come!

SLSC Public Telescope Viewing Events: These events are held the first Friday of the month Planetarium shows start at 7pm

Dobsonfest - Sept 14 hosted by Riverbend

Pattonville Observatory Public Viewing Dates See you in August, 2024

Broemmelsiek Astronomy Park Public Viewing Every Friday

UMSL Observatory
For directions and map
http://www.umsl.edu/~physics/About%20the%20Department/astro.html All sessions include viewing of 1st quarter Moon with additional objects
Skywatch Hotline: 314-516-5706
Saturdays:

LET US KNOW YOU ARE COMING!

To RSVP for any of these events log in to the Night Sky Network and submit your RSVP. If the event is canceled, you will be notified immediately according to the preferences you have selected.

SLAS Events

	September
20 Fri	SLAS Regular Meeting
21 Sat	Aim for the Stars JCO
25 Wed	Manchester Parks—Fussner field
26 Thur	SLAS New Member Zoom
28 Sat	SLAS Dark Sky at Danville
	October
1 Tue	Clarendale Clayton
3 Thur	SLAS Board Meeting
4 Fri	SLSC First Friday
5 Sat	SLAS Dark Sky at Danville
9 Wed	Francis Park
9 Wed	Samuel Sachs Library
10 Thur	Eureka Hills
10 Thur	Stacy Park
10 Thur	Foley Park
11 Fri	Larson Park
12 Sat	Tower Grove Park
18 Fri	Stargazing at the Arch
18 Fri	SLAS Regular Meeting
19 Sat	Aim For the Stars and JCO
20 Sun	SLSC Solar Sunday
24 Thur	SLAS New Member Zoom
25 Fri	DarkSky Missouri Festival
26 Sat	SLAS Dark Sky Observing
	November
1 Fri	First Friday SLSC PTV
2 Sat	SLAS Dark Sky at Danville
2 Sat	First Saturday Nature Night
6 Wed	STEAM Academy School
7 Thur	SLAS Board Meeting
7 Thur	Oak Bend Library
7 Thur	Prairie Commons Library
9 Sat	Stacy Park Stargazing
12 Tue	Windsor Library
14 Thur	Scott Air Force Base Library
15 Fri	SLAS Regular Meeting
16 Sat	Aim For the Stars at JCO
17 Sun	SLSC Solar Sunday
28 Thur	SLAS New Member Zoom
30 Sat	SLAS Dark Sky at Danville
	December
5 Thur	SLAS Board Meeting
6 Fri	First Friday SLSC PTV
15 Sun	SLSC Solar Sunday
20 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 _____

Youth @ $10.00 / 1 year (18 yrs or younger) $_____

Individual @ $25.00 / 1 year $_____

Family @ $40.00/1 year $_____

TOTAL ENCLOSED **$_____**

Check all that apply: ___ Renewal ___ Address Change Only

___ Please send my newsletter by regular mail ___ ***New Member!***

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

Sky and Telescope: MAGAZINE LINKS (SLAS no longer processes magazines, use these links instead)

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

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

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

Star Date Magazine: https://stardate.org/ (from McDonnell Observatory)
If you subscribe to SkyTips email newsletter, you will get a 15% discount code!

SLAS OFFICERS

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Larry Campbell 636-244-2867
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Devoted to the Interest and Advancement of the Science of Astronomy

ST. LOUIS ASTRONOMICAL SOCIETY

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

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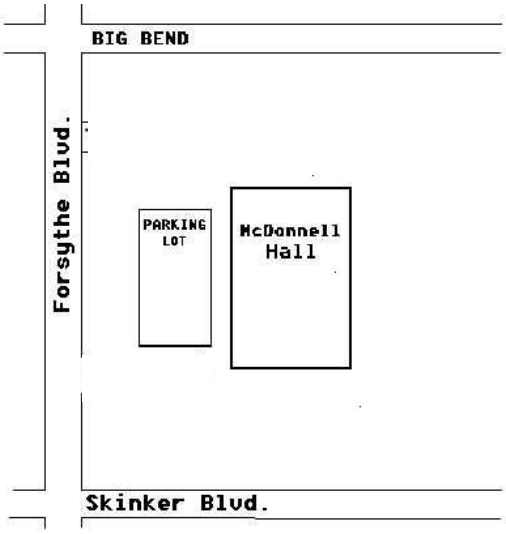
Who We Are and What We Do

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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