

THE EVENT HORIZON



ST. LOUIS ASTRONOMICAL SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

VOLUME 25, Issue 3
March, 2015

An Asteroid Tour: NASA's Dawn Spacecraft Mission

Richard Heuermann of Washington University, will be featured at the March meeting of the St. Louis Astronomical Society. The meeting will begin at 7:30 PM Friday, March 20, in McDonnell Hall, Room 162, on the Washington University campus, Saint Louis, MO 63130.

Just this month, NASA's Dawn spacecraft slipped into orbit around the largest asteroid, Ceres. Dawn had, after a four year journey from Earth, visited the asteroid Vesta for fifteen months before moving on to Ceres. Asteroids are small bodies of rock and metal, ranging in size from a few feet across to 590 miles across. Millions of them orbit the Sun, mostly between Mars and Jupiter. But some come much closer. To date, almost 5800 asteroids are known to have orbits that cross Earth's orbit. Mr. Heuermann will present some of the early results from Dawn's exploration of Vesta and show some images of its approach to Ceres. He will also talk about the origin and nature of asteroids, what they might reveal about the early history of the solar system, and about some of the opportunities and dangers of close encounters with Earth.

Rich Heuermann is the outreach program coordinator for the NASA Missouri Space Grant Consortium at Washington University. He is also a member of the Saint Louis Astronomical Society.

Future meetings:

April - Dr. Joseph Marcus M.D. Comet 67P And the Rosetta Spacecraft"

May - Kathrin Powell "All the Mars Rovers and Discoveries"

SLAS Dark Sky Campout Weekend

March 20-22, 2015

**Council Bluff Recreation Area,
Potosi, MO**

SLAS along with other local amateur astronomers will hold a campout weekend at Council Bluff Recreation Area near Potosi, MO Friday through Sunday March 20-22, 2015. We have reserved campsite 17. Cost of the campsite is \$20 per day which will be divided among the partici-



pants

Campsite 17 is located next to the outdoor restrooms. We will observe in field due east of the restrooms.



There is no electrical power available. Water is shut off until April 1st so please bring water. Tent camping only please.



There is a lake for boating, see Council Bluff Recreation Area website for facility info.



Please RSVP so we can add more campsites to accommodate the crowd. Spots will be prioritized for persons who RSVP.

Some of us will do visual observing of Spring galaxies and nebula. Others will experiment with astrophotography. Bring your telescope and camera Please bring your camping supplies, tents, etc.

If you need further details contact Mark Jones at darksite@slasonline.org

See the following websites:
<http://tinyurl.com/lnzmbk3>
<http://tinyurl.com/pcs7uhv>

Mid States Region



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President's Corner

by
Jim Small

We are still looking for **someone to run for the Membership/Hospitality position that is vacant**. At this point, we will likely just wait until the elections in May to permanently fill the position. We could use someone to do hospitality for us at the April and May meetings. Tom Nickelson will be doing hospitality for us this month. Thanks in advance to Tom. Contact a board member if you are interested in running for the position.

Homemade Fest went very well! Many thanks to Brad Waller for serving as the host for the event.

The **contest** for designing a **case for Library Telescopes** is still under way and presentations were made at the Homemade Fest last month. Winners will be announced at this month's meeting.

Neil deGrasse Tyson raffle tickets are still available. \$2 each or 6/\$10. See Brad Waller for details and tickets. The drawing for the raffle will take place at the April meeting.

There are *many* **Star Parties and Events** coming in the next two months. **Please RSVP on Night Sky Network and be sure to show up if you RSVP**. We need to know we can count on you to assist us at various events. Check the SLAS calendar and sign up!

If you need help with the RSVP, please ask at the meeting and we can get you started. Also see the events page in this newsletter.

Last month we added a social 5 minutes or so to the beginning of the meeting to give members a chance to meet visitors and new members as a means of making the meetings a more enjoyable experience for members and guests. We didn't make it clear that we meant for all members to participate. It would be great if we could have everyone participate in that event this month!

For the April meeting and future meetings, we are adding a new members meeting that will begin at 6:45 pm, just before the meeting. We will look forward to meeting the new members at that meeting!

The build for the next phase of the Library Telescope program will take place April 11 at Parkway West High School. See the SLAS calendar to sign up. Speak to Don Ficken if you have questions!

Astronomy Day has been set! After difficulty finding a location because the Planetarium will be unavailable, Kirkwood Library has stepped up and will host the event! It will be very similar to past Astronomy Days with solar viewing, tables for information and activities inside and prize giveaways.

Those people who earned Night Sky Network Outreach pins will be given their awards at the March meeting. If you were on the list posted in the January newsletter, we will give you your pin this month!

MSRAL

The Mid-States
Region of the
Astronomical League
Convention

May 29-31, 2015

University of Little
Rock, AK

Registration Page is
Open!

<http://msral2015.caasastro.org/>

See you there!

RAFFLE!

Neil deGrasse Tyson
Peabody Theater
May 13, 2015

Tyson is coming and SLAS is holding
a raffle for 2 tickets for this event!

Tickets are for members only

They are \$2 each or 6 for \$10

See Brad Waller at the meeting for tickets.

You need not be present to win.



Library Telescope Program

In addition to the regular star parties, be sure to volunteer for the Library Telescope events we have planned on the calendar. If you see that these events are well supported with volunteers, be sure to make sure other events are covered. We will be needing many volunteers for all of our events over the course of the year!

Many thanks to Don Ficken for his hard work in putting the program together! The build for this year will be for about 50 telescopes and will take place on Saturday, April 11 at Parkway West High School. **BE SURE TO RSVP** on the Night Sky Network for the build.

SLAS Members to Receive Outreach Awards at the March Meeting

The following members will receive Night Sky Network Outreach pins and certificates at the March meeting. If you are receiving an award, please try to make the meeting.

2014 Awards, 5 or more events

Cook Feldman	33 events; 108.3hrs
John Beury	29 events; 95hrs
Donald Ficken 2	8 events; 76.1hrs
Larry Campbell	21 events; 63hrs
Mark Jones	17 events; 57hrs
James Small	15 events; 41hrs
Jim Trull	12 events; 39hrs
Rich Heuermann	11 events; 22hrs

Richard Fefferman	7events; 16.3hrs
Bill Breeden	6 events; 18hrs
William Winningham	6events; 16hrs
Ann Trull	5 events; 17hrs
Brian Mills	5 events; 11.5hrs
Rick Menendez	5 events; 13.3hrs
Michael Malolepszy	Outreach Coordinator



Volunteer to Serve on the Membership Recognition Committee by Larry Campbell

A Membership Recognition Committee has been formed and an email address (recognition@slasonline.org) has been set up so that recommendations can be submitted to the committee. The chairman, Larry Campbell, is seeking committee members to begin the task of deciding how best to recognize the many volunteers within SLAS who donate so much time and effort to our society. If you have any experience with any recognition programs with any organization (astronomical or otherwise), please contact Larry and volunteer to serve on this committee. However, experience is not a prerequisite to serving on the committee.

A primary goal of the committee is to create a recognition program with annual recipients of various rewards. This program will go beyond the annual recognition of our Outreach volunteers. However, exactly how we will do this is "To Be Determined." If you have any thoughts on this subject, please share them with the committee. A \$200 budget has been allocated for this effort. Help decide how to spend it wisely.

Dual Head telescope by Mark Jones

One to the unexpected by-products of the Library telescope Program (LTP) has been the interaction with students and educators on an informal level. There is great interest and great reward from this interaction. Case in point, last November 13th we had one of our first LTP sessions at the Machacek library for the city of St Louis Library. At the end of the session, a small group of kids and parents wanted to present their idea for a dual head telescope. They were hoping to mature the idea for the First Lego League Championship Tournament scheduled in December. After the meeting I continue correspondence with the kids, offering some ideas for making a prototype using materials from the local HW store and where to purchase the necessary optics. Their deadline fell at a

time I could not personally support, so I gave them contact information for two local microscope companies that might be able to provide mentoring and assistance. I suggested they contact these companies and see if their engineers could help them and even suggested they include 3D-printing in their project as a learning experience.

What a wonderful surprise when I received a "Thank You" letter from the kids, officially named Lego Ninjas Team 1495. They won an award at their regional competition and have submitted their design for the FLL Global Innovation Award! See the attached Thank You letter and FFL submission letter.

This is the first of many rewarding experiences I hope we have as a result of the Library Telescope Program.

See the next 2 pages for documentation from the students!

★ Dual-head Teaching Telescope ★

FLL Global Innovation Award Submission by Team #1495, Lego Ninjas

We chose the topic of astronomy because one team member (Luke) loves going to the St. Louis Science Center and spending time in its planetarium. As the earth rotates, the stars appear to move across the sky. Near St. Louis, the earth rotates at over 600 miles per hour! So, if a teacher focuses a telescope on an object in the sky, backs away from the telescope, and allows a student to look through the telescope, the student will not see exactly the same image that the teacher did. We want to let two people look into space at the same time so the student can learn more easily.

With a *regular telescope*, the teacher focuses on the moon (photo 1 above). There is a time lapse as the student moves to the telescope, and he sees something different (photo 2).

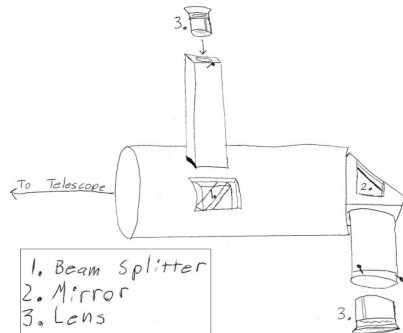
With our *Dual-head Teaching Telescope*, the teacher and student can look at the object at the same time, so they see exactly the same thing (photos 3 & 4).

Teacher (Sensei) *Student*

Our first idea to allow two people to use one telescope was one with a flipping mirror inside the telescope. But experts at the St. Louis Science Center and the amateur astronomers from the St. Louis Astronomical Society didn't think having moving parts inside a telescope was a great idea. So, we shifted our idea OUTSIDE the telescope, and tried a cube beam splitter to break the light that exits the telescope into two pieces. We have built four **prototypes** so far:

 1	 2	 3	 4
<p>Papier-mache paper towel rolls, for our first skits.</p>	<p>A car side-view mirror and parts we bought at a hardware store proved our idea was feasible.</p>	<p>3-D printed, but had problem with reversed images.</p>	<p>3-D printed with 1 extra mirror and a longer lens holder so eyepiece spacing is equal.</p>

Our fourth prototype was a success! Two people have been able to look at the moon at the same time!



Here is a cut-out drawing of our invention, showing the cube beam splitter and the extra mirror we added for prototype 4.

This is a photo of two people using the dual-head teaching telescope.

Thank you!

March 4, 2015

Dear Mr. Jones and the St. Louis Astronomical Society,

Thank you! You helped us win the Project Innovative Solution Award at our state First LEGO League (FLL) Championship Tournament. We really appreciated you taking the time to meet with us and help us learn more about how telescopes work and similar inventions that are already in use. Thank you for also encouraging us to keep trying, and giving us a start with prototype drawings. We did build a prototype with parts from Home Depot and a glass company. But we have gone farther and used a 3-D printer to make three more prototypes to attach the cube beamsplitter (that Seiler Instruments let us use) to our telescope and lenses. We have learned so much this season!

These are pictures of us with our trophies at our Regional Tournament (left) and the Illinois Central FLL Championship Tournament.



We have also recently entered the contest for the FLL Global Innovation Award. After all of your help, we just might win! You can search for our team by number (1495) on the website flsinnovation.firstlegoleague.org. We have included two pdf files with more specific details of our submission so you can see the progress we have made since we first met with you.

If you have any questions or advice,
Again, thank you!

email us at LegoNikki@charter.net.

Sincerely,

The Lego Ninjas, Team 1495:

Gabe Kurfman, Luke Bauer, Devin Tucker, and Megan Tucker,
and our coaches, Nikki Kurfman and Sarah Tucker

Please share this with the other three men that were at our first Star Party. They are Don Ficken, Brian Mills, and John Beaury.

10:07 PM
03/11/15
Accrual Basis

St. Louis Astronomical Society
Profit & Loss Budget vs. Actual
January through February 2015

St. Louis Astronomical Society
Balance Sheet
As of February 28, 2015

	<u>Jan - Feb 15</u>	<u>Budget</u>	<u>\$ Over Budget</u>
Ordinary Income/Expense			
Income			
Magazine Subscription	398.75	233.80	164.95
Membership Dues	920.00	590.00	330.00
Merchandise Sales	163.48	0.00	163.48
Total Income	1,482.23	823.80	658.43
Cost of Goods Sold			
Magazine Subscriptions	398.75	233.80	164.95
Total COGS	398.75	233.80	164.95
Gross Profit	1,083.48	590.00	493.48
Expense			
Programs & Events	796.78	883.32	(86.54)
Newsletter	66.72	30.00	36.72
Library expense	10.46	0.00	10.46
Loaner Scopes *	13.35	0.00	13.35
Website		135.00	(135.00)
Administrative Expenses	349.43	194.66	154.77
Total Expense	1,236.74	1,242.98	(6.24)
Net Ordinary Income	(153.26)	(652.98)	499.72
Other Income/Expense			
Other Income			
Donations	1,150.05	0.00	1,150.05
Interest Income	10.49	16.00	(5.51)
LTP Receipts	1,170.00	0.00	1,170.00
Total Other Income	2,330.54	16.00	2,314.54
Other Expense			
LTP Disbursements	1,629.37	0.00	1,629.37
Total Other Expense	1,629.37	0.00	1,629.37
Net Other Income	701.17	16.00	685.17
Net Income	547.91	(636.98)	1,184.89

	<u>Dec 31, 14</u>	<u>Feb 28, 15</u>
ASSETS		
Current Assets		
Checking/Savings		
Checking - First Bank	5,161.12	4,241.05
Deposit, Certificate of	20,068.06	20,078.18
Library Telescope Escrow *	1,660.10	1,207.33
Merchandise Change Fund	20.00	20.00
PayPal	82.81	87.12
Savings - First Bank	3,359.27	5,359.64
YMCA Trout Lodge Escrow	542.87	542.87
Total Checking/Savings	30,894.23	31,536.19
Other Current Assets		
Inventory Asset	1,614.22	1,614.22
Undeposited Funds	261.95	0.00
Total Other Current Assets	1,876.17	1,614.22
Total Current Assets	32,770.40	33,150.41
Fixed Assets		
Accum Depr - Office Equip	(216.65)	(216.65)
Office Equipment	216.65	216.65
Total Fixed Assets	0.00	0.00
TOTAL ASSETS	32,770.40	33,150.41
LIABILITIES & EQUITY		
Liabilities		
Current Liabilities		
Accounts Payable	167.90	0.00
Total Current Liabilities	167.90	0.00
Total Liabilities	167.90	0.00
Equity		
Opening Bal Equity	8,137.66	8,137.66
Retained Earnings	22,221.50	24,464.84
Net Income	2,243.34	547.91
Total Equity	32,602.50	33,150.41
TOTAL LIABILITIES & EQUITY	32,770.40	33,150.41

* Loaner Scope annual budget amended by vote of membership from \$200 to \$1,200.

* Funds restricted for the Library Telescope Program

Astronomy Day

Saturday, April 25, 2015 from 10am - 4pm

Kirkwood Public Library

Solar Viewing, Activities, Displays, Information

Galileoscope Giveaways Hourly

Celestron Telescope Grand Prize

St. Louis Astronomical Society Executive Board Meeting Minutes for February 12, 2015

1. Opening Activities: Jim Small, Paul Baldwin, Bill Winningham, Brad Waller, Larry Campbell, Mark Jones Meeting called to order 6:52pm. Motion by Brad to approve January minutes. Larry seconded motion, minutes were approved.

2. External Business SLSC Friday, March 6: SLSC is not available for Astronomy Day on April 25th. Alternate locations... Kirkwood not available Mark is checking with Babler State Park.

Next board meeting: March 12, April 9, May 7, June 11, July 9, August 6, Sept 10, Oct 8, Nov 12, Dec 10.

3. Director Reports:

President: Goals for 2015 and beyond. The beginnings of a strategic plan.

- 1. Attract new members – We need plans to increase our base membership significantly during the course of the year.**
- 2. Retain members – We need plans to retain members that join beyond one year.**
- 3. Get members involved – We need significant plans to involve our members in both programs and as volunteers.**

Gained 12 new members so far this year

Homemade Fest is set for February 21, 2015 in Room 201a-b at Kirkwood Community Center from 5-10 pm. Kirkwood Parks Dept has graciously provided the facilities at no charge again. The room has ten 8' tables and 75 chairs. We have agreement to be signed and submitted. Mark will contact Rich Hueermann to bring laptop and projector. Brad will be the MC and bring the door prizes. Grant will bring the paper goods and coffee pots. Mark will bring soda and ice. Jim to bring sound system. Brad received the autographed books from Mike Brown. Balance \$30 for the ice and drinks. Brad has the tickets for the door prizes. Brad will send out reminder for presentations.

Vice President –Paul Baldwin: February – Dr. William Smith to speak on the Kepler Mission; March- Rich Heuermann on Asteroids, Ceres and the Dawn Spacecraft; April - Dr. Joseph Marcus M.D. who will talk about Comet 67P And the Rosetta Spacecraft; May - Kathrin Powell on "All the Mars Rovers and What They Have Discovered"; June – idea for pre-Pluto Party. **Astro 101: Topic:** February. Mark will do a demo of counting to a million using a sand model.

Secretary – Mark J no report

Treasurer/ALCor – Bill will ask Grant about the change fund, approx. \$20. May need to write this off. Net income was negative for the month is approx \$1300 mainly due to buying parts for the next Library Telescope build. Membership keeps increasing. Bill transferred \$2000 from checking to savings. SLAS just received a \$1000 donation from William Neubert.

Hospitality – vacant. Tom Nickelson has volunteered to do hospitality for February.

Board member at large reports

Larry Campbell Recognition program report. No volunteers yet.

Tom Nickelson: No report

Brad Waller: Tyson ticket raffle, 60 tickets sold, need 70 to break even. Must be a member to play. Suggestions for new member welcome packet. Input desired. **Welcome packet** NSN guide including how to RSVP Small Loaner telescope and list - Jones Dialogs - Jones Newsletter - Small Maps - Campbell Library - Small Calendar for upcoming events- calendar Sky map, planisphere – Ficken/Jones Observing for the month - Jones Decal – Small Merchandize - Small New members meeting. – take new members to separate room prior to meeting around 6:30. Hand out new member packet answer questions. When to start? This month? Social input at meeting?

4. Committee Reports: If needed

Library Telescope Program: Telescope case contest announced. Build is planned for April. Currently have telescopes planned for Belleville, Jefferson County, St Charles County and ASEM, libraries in the consortium, more for SLCL. Training went VERY well. More to come-

Membership – Membership is up by 12 from Dec 31st. Remember, both retention and new members are a priority.

Merchandise – SLAS logo is in progress with Infini-Tees.

Telescope Making – no report submitted

Librarian – No changes

Newsletter – Will be out this weekend in order to get the word out about the motions for the Library Telescope programs for new members.

Website – new website still in progress, see www.slasonline.org/joomla

Night Sky Network – Many star parties on the list. Be sure to volunteer!

SLASdialogs – No report

Dark Site – None planned until March.

Loaner Equipment – \$13 spent to improve the tripod for C8. Loaner Budget is \$200

Publicity – release sent

Observing Programs – no report

Star Parties: Upcoming star parties: 2/24 - Machecek Library, 3/2 – SLCL, 3/4 – SLCL D. Boone, 3/5 – Premier Charter, STEAM, 3/6 – SLSC, 2/23 -Ed Jones, 3/31 Schlafly, 4/1 – UC, 4/3 – SLSC,

5. Old Business

6. New Business

Motion regarding the purchase of 4 library telescopes to be placed in our loaner scope program for new members from Mark Jones.

The Library Telescope program is starting with great success and SLAS has budgeted funds to procure telescopes for donation to local libraries. In many cases, libraries are also using their own funds to buy additional scopes. So far more than 15 scopes are now in the library systems around St. Louis. We expect to add 15-30 more Library Telescopes by the end of 2015. So far the trend we see is that the demand for telescopes exceeds the number in the library systems. This means the waiting lists for these telescopes is very long. Even with a 1 week checkout period, waits can be 2-4 months to get a scope. As we approach summer we expect the demand for telescopes to increase. Already our volunteers are hearing from the Public about the long waiting lists. This could create a great membership opportunity for SLAS. If SLAS were to add 4 of these scopes to our Loaner Scope Program we could offer shorter wait times to members. This could be a big incentive for people to join SLAS.

Motion: I propose that SLAS procure four library telescopes for checkout by SLAS members only. These scopes would be built by the Library Telescope Committee as part of their upcoming build program. Buying the scopes at the same time as the other Library Telescopes, will leverage any quantity pricing discounts we get from the suppliers. The building of the scopes is planned for April 2015 and the scopes will be ready for loaning to members by mid-May 2015. These scopes would be maintained by the Loaner Telescope Committee for repairs, etc. These scopes would be checked out through the membership committee to provide faster turnaround than normal Loaner Scopes. Therefore I ask that \$1000 be approved to the Loaner Scope Committee Budget for the purpose of buying these scopes. The existing \$200 Loaner Scope budget will remain for future maintenance of all scopes. Unlike current Loaner scopes, these would have these new rules.

1. Checkout times would be a shorter duration of 2 weeks rather than 4-8weeks for other Loaner scopes.
2. These scopes would be for check out by new and existing members.
3. A standard Loaner Scope deposit of \$75 would still be required.
4. These scopes would have most of the same modifications as the Library scope configuration.

Motion by Mark, second by Paul B. All in favor but opposed Brad.

Motion passed

Discussion: Should Hospitality be split into the board position of Membership and the committee head of Hospitality? Table until next month

Motion by Jim Small: SLAS should pursue the acquisition of a grant of \$2500 for outreach money to support our programs. Second Bill.

Motion passed.

Parameters for the award and some suggestions provided by Mark Jones:

Looking at our by-laws and the possible reorganization of the operating structure of the Society. Table to next month.

Motion by Brad Waller: "I propose we extend a SLAS 1 year membership to Dr. Mike Brown, at Cal-tech in appreciation for his generosity of providing autographed books for MSRAL 2014 and for Homemade fest 2015." Second by Paul Baldwin. All in favor but opposed Mark Jones.

7. Closing Activities Brad motion and second by Paul. Meeting adjourned at 9:20pm

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 *Location will be at the Edward Jones YMCA*

4/9/2015	5/7/2015	
6/11/2015	7/9/2015	8/6/2015
9/10/2015	10/8/2015	11/12/2015
12/10/2015		

Dark Sky Observing Dates

See you in April!

Francis Park Events: These events are on Wednesdays the week nearest the first quarter Moon

4/22/2015	5/27/2015	6/24/2015
7/22/2015	8/19/2015	9/16/2015
10/21/2015		

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

4/3/2015		
5/1/2015	6/3/2015	None in July
8/7/2015	9/4/2015	10/2/2015
11/6/2015	12/4/2015	

YMCA Edward Jones Star Parties

3/23/2015	4/13/2015	5/11/2015
6/8/2015	7/13/2015	8/10/2015
9/7/2015	10/5/2015	

Pattonville Observatory Public Viewing Dates

March 27, 2015	Friday 7:00-9:00 p.m.
April 10, 2015	Friday 8:30-10:30 p.m.
April 24, 2015	Friday 9:00-11:00 p.m.
May 1, 2015	Friday 9:00-11:00 p.m.
May 22, 2015	Friday 9:00-11:00 p.m.

SLAS EVENTS

March

20 Fri	SLAS Regular meeting
	SLAS Dark Sky Campout
21 Sat	SLAS Dark Sky Campout
	SLAS Dark Sky Observing
22 Sun	SLAS Dark Sky Campout
23 Mon	Edward Jones YMCA
31 Tues	Schlafly Library SLPL

April

1 Wed	UC Library Star Party
3 Fri	SLSC Public Telescope Viewing
9 Thur	SLAS board meeting
11 Sat	Library Telescope Build
17 Fri	SLAS regular meeting
18 Sat	SLAS dark sky Observing
20 Mon	Edward Jones YMCA
21 Tues	St Louis Central Public Library
22 Wed	Francis Park
23 Thur	Manchester Park
25 Sat	Astronomy Day
	AD Night Skies Over Babler
27 Mon	Florissant Branch SLCL

MAY 29-31 MSRAL at Univ AR - Little Rock

SLAS Merchandise Available

SLAS merchandise is now set up for embroidery at

Headz n Threadz at <https://hnt.threadthis.com/>

There are two locations:

Galleria: 2495 St. Louis Galleria, St. Louis, MO 63117

Telephone: 314.862.2695
galleria@headznthreadz.com

Delmar: 6662C Delmar Blvd St. Louis, MO 63130 Telephone: 314.863.2695 delmar@headznthreadz.com

[Delmar Map](#)

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 Soon to be Available at Infini-tees and Johnny Mac's

The SLAS logo is in the process of setup at Infini-Tees. When it is ready, you will be able to have the SLAS logo placed on any shirt IT sells.

In addition, we will be setting up the logo with Johnny Mac's so there is a local dealer with multiple locations that may make SLAS merchandise. We will let you know when that is ready for sales.



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 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 \$ _____
Publications with discount available with your SLAS membership:
 Sky and Telescope @ \$32.95 / 1 year \$ _____
 (S&T may also be renewed at their website:
<http://www.skyandtelescope.com>)
 Astronomy @ \$34.00 / 1 year \$ _____
TOTAL ENCLOSED \$ _____

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

Check all that apply:
 Renewal
 Address Change Only
 Please send my newsletter by regular mail
 New Member!

SLAS OFFICERS

<u>President</u>	Jim Small	314-307-0692
	president at slasonline.org	
<u>Vice President</u>	Paul Baldwin	314-781-4080
	vicepresident at slasonline.org	
<u>Secretary</u>	Mark Jones	636-394-2342
	secretary at slasonline.org	
<u>Treasurer</u>	Bill Winningham, (Don Ficken - membership)	
	treasurer at slasonline.org	636-225-0269
<u>Hospitality</u>	Vacant effective Dec 31	
	hospitality at slasonline.org	
<u>Board Members at Large:</u>		
	Tom Nickelson	314-346-9565
	board17 at slasonline.org	
	Larry Campbell	636-244-2867
	board15 at slasonline.org	
	Bradley Waller	314-481-7250
	board16 at slasonline.org	
ALCOR	Bill Winningham	636-225-0269
(Astronomical League Correspondent)	treasurer at slasonline.org	
MSRAL Rep.	Jim Small	314-909-7211
	msral_rep at astroleague.org	

COMMITTEE CHAIRS

<u>Dark Site Coordinator</u>	Mark Jones	636-394-2342
	darksite at slasonline.org	
<u>Librarian</u>	Jim Small	314-909-7211
	librarian at slasonline.org	
<u>Library Telescope Program</u>	Don Ficken	636-851-9630
	librarian telescope at slasonline.org	
<u>Loaner Equipment</u>	Greg Gaines	314-277-3082
	loaner at slasonline.org	
<u>Merchandise</u>	Vacant	
	merchandise at slasonline.org	
<u>Membership</u>	Don Ficken	636-225-0269
	membership at slasonline.org	
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	newsletter at slasonline.org	
<u>Observing Programs</u>	Mark Jones	636-394-2342
	observing at slasonline.org	
<u>Publicity</u>	Rich Heuermann	314-962-9231
	publicity at slasonline.org	
<u>Recognition</u>	Larry Campbell	636-244-2867
	recognition at slasonline.org	
<u>'SLASdialogs' Moderator</u>	Mark Jones, Rhonda Whelan	
	dialogsmoderator at yahoo.com	
<u>Star Party Coordinator</u>	Mike Malolepszy	314-781-4701
	starparty at slasonline.org	
<u>Telescope Making</u>	Bill Davis, Jim Melka	314-469-3061
	telescope at slasonline.org	
<u>Webmaster</u>	Jim Small	314-909-7211
	webmaster at slasonline.org	

Devoted to the Interest and Advancement of the Science of Astronomy

ST. LOUIS ASTRONOMICAL SOCIETY

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

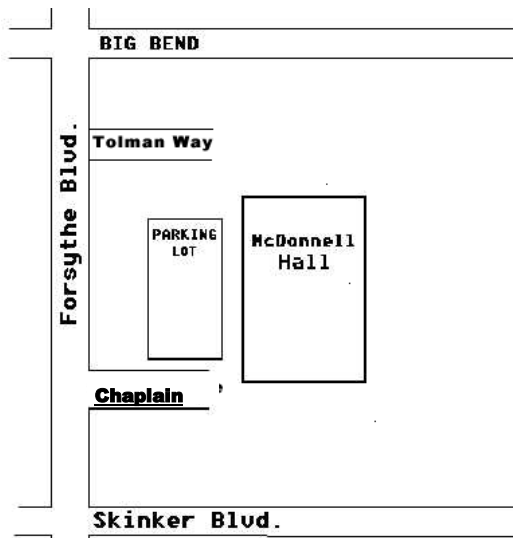


Who We Are and What We Do

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.



St. Louis Astronomical Society

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