# THE EVENT HORIZON



#### Inside This Issue

President's Corner Volunteer hours	2
IDA Missouri Annual Conference Francis Park	3
Gallery	5
Board Minutes	6
Financials	7
Events	8
Contacts	9

## China's Exploration of the ex Moon – The Chang'e Missions <sup>th</sup>

**ST. LOUIS ASTRONOMICAL** 

SOCIETY

Devoted to the Interest and Advancement of the Science of Astronomy

#### *by* Professor Brad Jolliff Washington University

Professor Brad Jolliff of Washington University will be featured at the June meeting of the Saint Louis Astronomical Society. The meeting will be held online via Zoom. The meeting and lecture will begin at 7:30 p.m. on Friday, June 18. Zoom access information is posted on the Society's website, www.slasonline.org and below.

China has launched a very active program to explore the Moon. Professor Jolliff will discuss the lunar exploration program of the Chinese National Space Administration (CNSA). Their program has successfully completed five missions, Chang'e-1 through Change-5. These have featured robotic lunar orbiters, landers, and rovers. Dr. Jolliff will explain what these missions have accomplished and what the plans are for continued exploration of the Moon, including plans for the first Chinese astronauts on the Moon.

June. 2021

VOLUME 31, Issue 6

Brad Jolliff is the Scott Rudolph Professor of Earth and Planetary Sciences and the Director of the McDonnell Center for the Space Sciences at Washington University. His current focus is on science and exploration of the Moon. He is a member of NASA's Lunar Reconnaissance Orbiter Cameras science team and he is involved in numerous science and exploration projects related to the Moon.

#### **Upcoming Meetings 2021**

July - John Newcomer, Hiking on the Mountains of the Moon SLAS August- Robert Criss, PhD Galactic Rotation & Dark Matter Washington University September - Larry Bartoszek, PE The Sloan Digital Sky Survey Telescope October TBA November - Voyager speakers December - TBA

#### Joining a Zoom Conference Meeting: Everyone can join! No Computer Required!

Joining us for a Zoom Conference is easy! All you need is any of the following: Computer, desktop or laptop, smartphone, **OR** any regular phone! The meeting will be open from 6:30-11pm. The extra time is to allow socializing before or after the meeting Below is the invitation to join: To join Zoom Meeting for SLAS Regular Meeting with computer or smartphone: Just click the link below: https://zoom.us/j/8604505790

Meeting ID: 860 450 5790 **Dial by ANY phone** using your location (any phone will work) +1 312 626 6799 US (Chicago)

## **SLAS Election Results!**

Here are the results from the May e	elections:
President - Jim Small	Vice President: Bradley R. Waller
Treasurer: Bill Winningham	Secretary: Mark Jones
Hospitality: Larry Campbell	Board Member at Large: Brent Buch
Many thanks to these members who	o volunteered to help run the St. Louis Astronomical
Society for another year! It's a lot	of work and their efforts are greatly appreciated!

#### **President's Corner** by **Jim Small**

It's been rough at the Small residence. Just personal, but had to deal with gout attacks for about three weeks, so it kind of put me out of commission for a while. Still muddling through it, but hey, it is what it is... Otherwise, I would have been happy to make it to a few of the star parties we've had since we opened back up! Apparently, things were HOPPING Wed night at Francis Park as you can read about with Bill's article on page 3. 200 attendees! It's great to be back in the game again.

We did miss having MSRAL this year again, even though we likely could have held it in a decently safe environment. I made up for that myself by attending the AAS meeting last week. The cost for amateurs is relatively inexpensive for the 3 day intense meeting; only \$149. It was also great to get together at one of the social events for amateurs and discuss what the AAS could do for us, especially in the realm of joint ventures between professional and amateur astronomers. There are some real possibilities there. There are looking to have the dome moved by the end of July and are also several speakers for our group from this conference and I already have Bradley working on several of them. You will meet one of the group at Friday's meeting. Emily Rice is the owner of the Astro-fashion site called STARtorialist.com and will show off some of her goods at

## **Outreach Volunteer Hours** for Jan-June 1 2021

So far, SLAS volunteers logged 77 hours from Jan 1st to June 1st

Members with 5 or more events for 2021, can qualify for the Night Sky Network pin.

Please go to NSN and make sure your volunteer hours are correct and enter any missed hours.

Check NSN for future opportunities and sign up today.

Thank you to all our volunteers!

our meeting. There will also be an attendance prize of a \$25 gift certificate given away. In other meeting news, ALCON will be free and will be a virtual meeting held this summer.

In lieu of a full meeting for MSRAL, there will be a business meeting on Saturday, June 26 at 10am. The link for the meeting will be sent to members and will be available through the MSRAL.org website.

Several members including myself are thinking seriously about hosting the MSRAL conference for 2022. That will be brought up at the meeting to see if there is interest in the group for hosting the conference. We have not hosted since 2014, so a number of us thought it would be time for us to step up. If we get a good response at the meeting Friday, we will bring it up at the business meeting on the 26th. I am looking forward to the possibilities this conference could offer us, especially with the Jefferson College Observatory coming on line by then. It will be great to show it off at the meeting!

Speaking of JCO, things are moving along nicely, and we have the observatory operational by then! Can't wait to put that 16" Meade to good use!

We also still have three telescopes for sale that would be great for beginners. All three are 4.5" reflectors, one computerized, two of them Meades.

## For Sale:

Celestron Ultima 11 (11" Schmidt-Cassegrain, #11050-PEC) purchased about 1995. My son and I used it through 2006 when he finished high school, and I have used it rarely since - probably last time was the Venus transit. It is in excellent condition. If you are interested contact Scott Martin via email at the following address: martsam@sbcglobal.net



## **Seeking the Dark: Nighttime Beauty, Biology, and Tourism** SLAS to exhibit at IDA Missouri Annual Conference in Springfield – October 3-4



INTERNATIONAL DARK-SKY ASSOCIATION MISSOURI CHAPTER

The St. Louis Astronomical Society will be participating in the first annual conference of the Missouri Chapter of the International Dark Sky Association (IDA). The 1-1/2 day conference is scheduled for Sunday evening, October 3<sup>rd</sup> and Monday, October 4th and will be hosted by Missouri State University in Springfield, Missouri. ASKC will join more than a dozen exhibitors to host an informational booth at the conference.

The conference entitled "Seeking the Dark: Nighttime Beauty, Biology, and Tourism" is expected to draw partici-



pants from a wide range of astronomy, conservation, education, and municipal groups. The Executive Director of IDA from Tucson, Arizona will be the keynote speaker. Attendees will hear from more than a dozen expert speakers on the science of light pollution, dark sky partners in conservation, nighttime recreation in dark skies, the International Dark Skies Places Program, and ecotourism with emphasis on the 2023 and 2024 solar eclipses. The newly formed Missouri Eclipse Task Force (www.MissouriEclipse.org) will make a presentation at the conference. A filmmaker from the Astronomical Society of Kansas City will debut an "augmented reality" film made for IDA Missouri that features the Gateway Arch National Park to explain the Bortle Scale.

There will be no cost to participate in the conference with participation available either in-person or via Zoom. Inperson attendees can drive to Springfield, Missouri on Sunday, October 3rd with plenty of time to attend the evening program. The conference will end by 5pm on Monday, October 4<sup>th</sup> allowing travelers to drive back that evening. Discounted rooms rates are available at a local hotel.

To register for the conference and learn more about the list of presenters and exhibitors, please visit <u>www.darkskymissouri.org/conference</u> or or email Don Ficken (SLAS member and also President of IDA Missouri) at <u>idamissouri@darksky.org</u>.

#### Stargazing Returns to Francis Park by Bill Breeden

ST. LOUIS – We last gathered at Francis Park twenty months ago. The COVID-19 pandemic has been difficult and isolating for many of us. Although we have held many events virtually, nothing can replace in-person events! For the first time in nearly two years, members of the St. Louis Astronomical Society set up telescopes at Francis Park to present views of the Moon, Venus and Mars to the public. COVID safety measures were in place: We practiced social distancing, hand sanitizing, and many people wore masks. In addition, many SLAS members, have been fully vaccinated as well.



SLAS members setting up equipment for an evening of stargazing at Francis Park

We had 15 SLAS volunteers last night (June 16, 2021), most of whom brought telescopes. It was quite a scene – we spread out to accommodate social distancing, and there were many different types of telescopes. Dobsonian reflectors (6 to 8 inches), refractors (60mm and up), Schmidt-Cassegrains (8 inches), and at least one Maksutov Cassegrain (5 inches). What a selection of telescopes!



Cook F. shares views of the Moon with visitors using his 8-inch homemade Dobsonian.

This close to the summer solstice means a late sunset, so it is only natural that I packed my white-light solar filter. The sun displayed a nice sunspot just above the center of the disk. This view was quite a treat for our visitors.

<sup>(</sup>Continued on page 4)

#### **VOLUME 31, ISSUE 6** JUNE, 2021



Bill B. and my Meade 8-inch SCT set up for safe solar viewing.



Rita B. and Carol F. and our Meade 8-inch SCT.

And visitors we had – 200 by my estimate! Lucky for us they did not come all at once, but we had a steady stream of visitors throughout the entire event. Many families attended, wearing masks and practicing social distancing. I had families that were very interested in astronomy and were using star map apps on their cell phones. I even had a request for a double star in Leo (Algieba, or  $\gamma$  Leonis), so I proceeded to point the telescope at it for viewing. What a view! This 2<sup>nd</sup>-magnitude double is very close, with a separation of just 4.3". Some viewers could split it, while others had a tough time of it.

The main attraction last night was the Moon, six days old and very high up in the sky. The weather cooperated fully with our return to public outreach in the park, with very clear skies, and mild temperatures around 80 degrees.



Visitors enjoy viewing the Moon through my SCT.

Planets visible last night were Venus and Mars. Sadly, neither planet is showing very favorably right now; Venus is nearly full (it looks best as a crescent), and Mars is about as far away from Earth as it gets. Mars is showing a disk just 3.9" in apparent size, compared to 24" when it is at opposition every 26 months. Still, people enjoyed viewing these planets in person at the park, and it sure was nice to be outside observing again!



John B. and his Bushnell Dobsonian telescope preparing to view Venus.



Randy H. and his Celestron SCT.

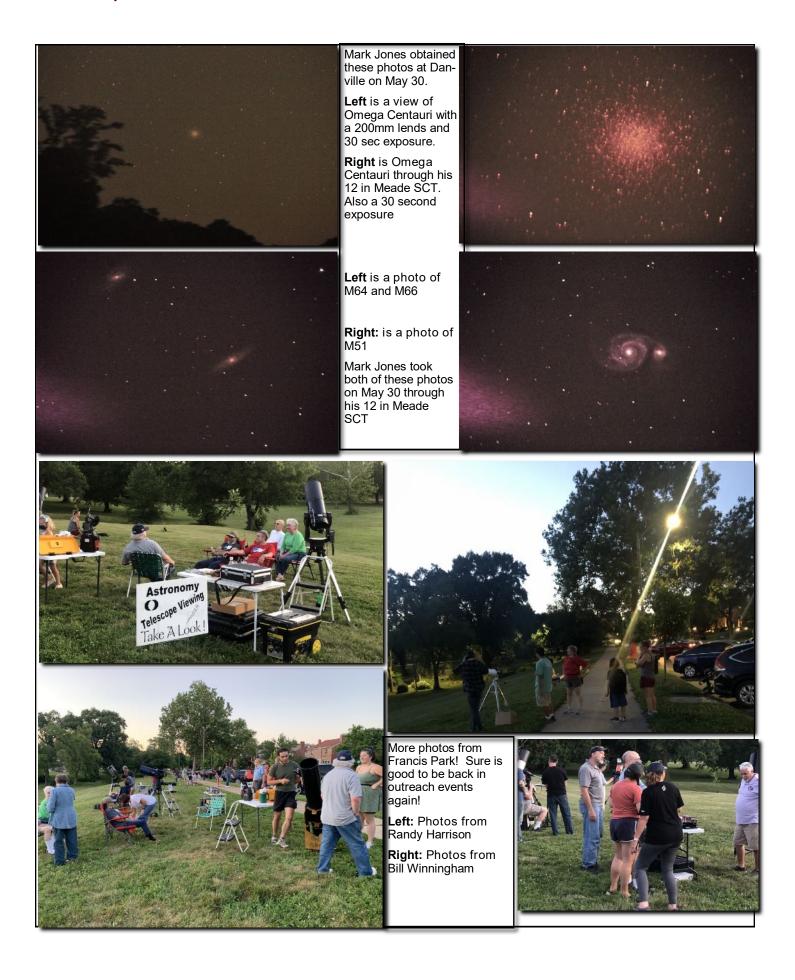
We had anticipated the possibility of parking problems and running out of space at our observing spot. Fortunately, that did not happen, but we sure filled up our space! With 10 telescopes spread out to accommodate social distancing, our observing spot was indeed filled. Parking turned out to be fine as well. Good weather, good friends, and good observing – what more could we ask for?

Clear Skies,

Bill Breeden

More photos from Francis Park in the gallery on the next page!

#### VOLUME 31, ISSUE 6 JUNE, 2021



#### St. Louis Astronomical Society Devoted to the Interest and Advancement of the Science of Astronomy Executive Board Meeting Minutes 5/6/2021

**1. Opening Activities** a. Attendance: Jim Small, Larry Campbell, Bill Winningham, Mark Jones, Bradley Waller, John Newcomer., Brent Buch.

b. Open Meeting 7:04pm

c. Approval of last month's meeting minutes. Minutes were distributed before the meeting. Motion to approved minutes made by Larry C, second by Bill W. Minutes were approved d. Next Board meeting date: Dates for 2021: Jun 3, Jul 1, Aug 5, Sep 2,

Oct 7, Nov 4, Dec 2. Meetings will be via Zoom until further notice:

- 2. Upcoming General Membership meeting topics: a. Speaker:
- b. Special Awards needed: not this month

c. Speaker Press Release: Periodic Table with Astronomy.

d. Special Business needed: none

e. A101: Could ask Grant Martin to present his spectroscope design

**3. SLAS Financial Report** a. Balance Sheet – as of April 30<sup>th</sup> assets \$84,000, cash \$68,000

- b. Profit/Loss report YTD \$830 scopes sales, and donations of \$190,
- c. Annual Budget meetings nothing planned until September
- d. Corporate filings: Bill W filed 990N
- e. Insurance: Bill W renewed the property and liability insurance

f. Other: Bill W wrote check for \$400 for Dark Sky Assn booth, ASEM and ASKC also contributed

**4. Speaker Committee** a. Budget - \$400. Program events, \$0 spent b. Upcoming speakers:

**SLAS Monthly Meetings** -Add a segment for Lookin' Up Optics to the meeting.

#### Presentations 2021

Name Month Topic Sponsor 21-May-2021 Larry Bartoszek, PE The Connection Between the Periodic Table and Astronomy NSS 18-Jun-2021 Brad Jolliff, PhD China's Exploration of the Moon: The Chang'e Missions Wash U 16-Jul-2021 John Newcomer Apollo 15 an Illustrated Mission Review SLAS Robert Criss, PhD 20-Aug-2021 Galactic Rotation & Dark Matter Wash U 17-Sep-2021 Larry Bartoszek, PE The Sloan Digital Sky Survey Telescope 15-Oct-2021 TBA 19-Nov-2021 Voyager speakers 17-Dec-2021 TBA c. Open dates for 2021 d. Topics of interest James Webb Space Telescope, Event Horizon Katie Bouman e. Stipends f. Travel Membership Initiatives a. Budget - \$450, spent \$99.66 b. Welcome Aboard Meetings - on hold however we are having monthly member chats using Zoom c. Raffles - none planned d. Attendance prizes this month. June solstice prizes include 2 eyepieces, and subscription to McDonald Observatory Newsletter 6. Membership Recognition a. Total Budget \$420, \$294 spent plaques and pins b. NSN Outreach Awards: planned for 1Q each year c. Membership Report: Attached is the April 2021 membership report showing 213 members, a reduction of three members from last month but still leaving us with a net gain of two members this year. Last year at this time we had 171 members. d. Member anniversary awards. Planned for 4Q each year 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 – No changes

3. Submittal deadlines: Board agreed to extend nomination deadline to June 1<sup>st</sup>.

- 4. Nomination reviews: Committee plans to review and make selections by Aug 1st
- 5. Award selection:

6. Plaques purchased: Design for perpetual plaque is ready to be submitted. Jim expects artwork to be ready to show at May general meeting

7. Awards presented:

- 7. Outreach -
- a. Budget \$700, spent \$23 for Velcro for signs
- 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: completed

e. Upcoming outreach events: Francis Park to resume in-person events, Manchester and Crestwood in-person events; Jefferson College Observatory to start in-person events in May

- 8. Old Business:
- a. Training Program start a committee
- 9. New Business: None
- 10. Other Committee Reports: If needed
- A. SLSC Business:
- a. First Friday actions: none scheduled
- b. Other immediate business
- B. SLCL Business:
- a. Annual contract on hold due to COVID
- b. Upcoming events at least two June events.
- C. Jefferson College Business:

a. Committee Meeting report: Meeting to be held May 19<sup>th</sup>. Concrete floor and pier have been completed. Waiting for Eagle Scout candidate to receive approval from BS council

- b. Upcoming Outreach Event: First in-person event planned for May
- 9<sup>th</sup>, with virtual event if cloudy
- D. Library Telescope Committee
- a. Budget \$300
- b. Upcoming builds or maintenance events
- c. Maintenance budget \$100, spent \$31
- d. Mileage re-imbursement see above
- e. Promotional materials \$200, \$0 spent
- E. SLAS Social Events
- a. Budget \$300, \$0
- b. Homemade Fest \$100 budget, needs to be re-scheduled
- c. Star-B-Q \$200 budget

#### Other

- F. SLAS Brochures
- a. Budget \$200, \$0 spent
- b. Quarter cards, none needed at this time
- G. Loaner scope Program
- a. Budget \$100, \$0 spent
- b. New donations –
- c. Replacement Parts for the LPTs -
- d. Items for sale 2 4.5" Newtonian equatorial telescopes. One

#### Meade, one B&L

- H. SLAS Library
- a. Budget \$500, spent \$56
- b. Other Obtained 5 more Great Courses
- I. Merchandise no activity
- J. Telescope Making no activity

#### K. Newsletter

a. Budget \$600, spent \$780 printer cartridges and included Publisher license, move Publisher expense to Admin budget

- L. Website Add Lookin' Up Optics to the website
- a. Budget \$690, spent \$179
- M. Social Networking
- Private FB page 69 members
- Public FB page 1480 followers
- N. Night Sky Network no report
- O. SLASdialogs 145 members
- P. Dark Site no report
- Q. Observing Programs no awards received
- R. Star Parties Donation: see Treasurer's report

**11. Closing Activities** Motion to close meeting by Brad W., second by Larry. Meeting adjourned at 8:56pm

St. Louis Astronomical Society Profit & Loss Budget vs. Actual January through May 2021			St. Louis Astronomical Society Balance Sheet			
	Jan - May 21	Budget	\$ Over Bud	As of May 31, 2021		
Ordinary Income/Expense Income Events Income	980.00		980.00		Dec 31, 20	May 31, 21
Magazine Subscription	1,982.75	1.004.25	978.50	ASSETS		
Membership Dues	2,215.00	1,825.00	390.00	Current Assets		
Total Income	5,177.75	2,829.25	2,348.50	Checking/Savings		
Cost of Goods Sold Magazine Subscriptions	1,894.80	970.25	924.55	Checking - First Bank Deposit, Certificate of	7,587.88 15,925.53	7,013.72 15,933.26
Merchandise	85.92			Library Telescope Escrow	1.206.41	1,336.31
Total COGS	1,980.72	970.25	1,010.47	PayPal	747.44	1,357.34
Gross Profit	3,197.03	1,859.00	1,338.03	Savings - First Bank	41,145.74	41,147.41
Expense 1-Programs & Events	881.68	1,421.00	(539.32)	Total Checking/Savings	66,613.00	66,788.04
2-Newsletter	640.02	355.00	285.02	Other Current Assets		
3-Library expense 5-Loaner Scopes 6-Brochures	366.70	200.00 50.00 125.00	166.70 (50.00) (125.00)	Inventory Asset	761.53	675.61
7-Insurance 8-Website 9-Administrative Expen	1,049.50 179.40 287.95	1,050.00 690.00 208.00	(0.50) (510.60) 79.95	Total Other Current Assets	761.53	675.61
Total Expense	3,405,25	4.099.00	(693.75)	Total Current Assets	67,374.53	67,463.65
Net Ordinary Income	(208.22)	(2,240.00)	2,031.78	Fixed Assets	15,336.00	15,336.00
Other Income/Expense Other Income Donations	290.00		290.00	TOTAL ASSETS	82,710.53	82,799.65
Interest Income	9.40	20.00	(10.60)	LIABILITIES & EQUITY		
LTP Receipts	29.90		29.90	Equity		
Total Other Income	329.30	20.00	309.30	Opening Bal Equity	8,497.66 72,581.69	8,497.66 74,212.87
Other Expense LTP Disbursements	31.96		31.96	Retained Earnings Net Income	1,631.18	89.12
Total Other Expense	31.96		31.96	Total Equity	82,710.53	82,799.65
Net Other Income	297.34	20.00	277.34		00 740 70	
Net Income	89.12	(2,220.00)	2,309.12	TOTAL LIABILITIES & EQUITY	82,710.53	82,799.65

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 astro photos? Please submit!

3. Bought something or built something? How about a review or an article!

Send to newsletter@slasonline.org

#### VOLUME 31, ISSUE 6 JUNE, 2021

## 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 Nicoletti's Restaurant in Valley Park All meetings are on First Thursdays unless noted. Note: Board meetings will be via Zoom until further notice. Jul 1, Aug 5, Sep 2, Oct 7, Nov 4, Dec 2

Dark Sky Observing Dates Jul ,10 Aug 7, Sep 4, Oct 2, Nov 6, Dec 4

Francis Park Events: These events are on Wednesdays of the week nearest the first quarter Moon July 14, August 11

**Sky Orienteering Events** For members who want to gather and do some relaxed observing at Babler State Park

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 On hold until further notice due to Covid 19

Pattonville Observatory Public Viewing Dates See you next year! Maybe!

Broemmelsiek Astronomy Park Public Viewing Every Friday by appt

UMSL Observatory For directions and map <u>http://www.umsl.edu/~physics/About%20the%</u> 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**

June

ed be at gs	16 Wed 18 Fri 19 Sat 19 Sat 21 Mon 24 Thur	Francis Park Stargazing SLAS Regular Meeting Gateway to the Stars Snores n Smores Kirkwood Park Constellation Tour 47 SLAS New Member Zoom
<b>nes-</b> nt to tate	1 Thur 3 Sat 4 Sun 5 Mon 10 Sat 12 Mon 14 Wed 16 Fri 17 Sat 19 Mon 22 Thur 29 Thur	July SLAS Board Meeting Audubon Center Aim for the Stars Jefferson College Constellation Tour SLAS Dark Sky Observing Constellation Tour Francis Park Stargazing SLAS Regular Meeting Gateway to the Stars Constellation Tour SLAS New Member Zoom Rock Hill Star Party
	2 Mon 5 Thur 7 Sat 8 Sun 9 Mon 11 Wed 16 Mon 20 Fri 23 Mon 26 Thur	August Constellation Tour SLAS Board Meeting SLAS Dark Sky Observing Aim For the Stars Constellation Tour Francis Park Constellation Tour SLAS Regular Meeting Constellation Tour SLAS New Member Zoom

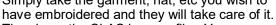
For other events, watch the calendar on the website. Virtual stargazing events and other online activities will be registered there. We hope you can join us for some of these activities!

#### **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



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** T. LOUIC Name: Last First, Middle Initial Address City, State, Zip Code email address Please send completed form with check (no cash please) made payable to Youth @ \$10.00 / 1 year (18 yrs or younger) \$ St Louis Astronomical Society Individual @ \$25.00 / 1 year \$ Don Ficken, Membership 13024 Barrett Crossing CT Family @ \$40.00/1 year \$ St. Louis, MO 63122 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) Check all that apply: Renewal Astronomy @ \$34.00 / 1 year \$ Address Change Only **TOTAL ENCLOSED** Please send my newsletter by regular mail New Member! SLAS OFFICERS **COMMITTEE CHAIRS** President Jim Small 314-307-0692 president at slasonline.org Dark Site Coordinator Mark Jones 636-394-2342 Vice President Bradley R Waller 314-481-72 vicepresident at slasonline.org Secretary Mark Jones 636-394-23 secretary at slasonline.org Treasurer Bill Winningham, (Don Ficken - members treasurer at slasonline.org 636-357-2 Hospitality Larry Campbell 636-244-2 hospitality at slasonline.org Board Members at Large: John Newcomer 314-496-4 board22 at slasonline.org Tom Nickelson 314-346-9 board23 at slasonline.org **Brent Buch** 314-239-03 board24 at slasonline.org

ALCOR Bill Winningham (Astronomical League Correspondent ) 636-357-2 treasurer at slasonline.org MSRAL Rep. Jim Small 314-909-7 msral\_rep at astroleague.org

7250	darksite at slasonline.org	030-394-2342
2342	Librarian Jim Small librarian at slasonline.org	314-909-7211
ship)	Library Telescope Program Don Ficken librarytelescope at slasonline.org	636-851-9630
2763	Loaner Equipment Greg Gaines	314-277-3082
2867	Merchandise Vacant merchandise at slasonline.org	
	Membership Don Ficken membership at slasonline.org	636-225-0269
4636	Newsletter Editor Jim Small newsletter at slasonline.org	314-909-7211
	Observing Programs Mark Jones	636-394-2342
9565	observing at slasonline.org Publicity Rich Heuermann	314-962-9231
0329	publicity at slasonline.org <u>Recognition</u> Larry Campbell recognition at slasonline.org Social Media Vacant	636-244-2867
	'SLASdialogs' Moderator Mark Jones, F	Rhonda Whelan
2763	dialogsmoderator at yahoo.com <u>Star Party Coordinator</u> Bill Breeden starparty at slasonline.org	314-276-3613
7211	Telescope Making Bill Davis, Jim Melka telescope at slasonline.org	314-469-3061
	Webmaster Jim Small webmaster at slasonline.org	314-909-7211

#### Devoted to the Interest and Advancement of the Science of Astronomy

#### **ST. LOUIS ASTRONOMICAL SOCIETY**



Skinker Blud.

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.

