

THE EVENT HORIZON



ST. LOUIS ASTRONOMICAL SOCIETY
*Devoted to the Interest and Advancement
of the Science of Astronomy*

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Mid States Region



Decoding the Message of Starlight

Richard Heuermann of Washington University, will be featured at the SLAS regular meeting for May.

The stars in the night sky appear to be fastened to a great dome suspended just above us. But the closest bright star to the sun is an unimaginable distance away - more than 25 trillion miles. Yet we can determine the properties of some stars that are a million times farther away than the closest stars. We can tell what stars are made of, how big they are, how hot they are, how fast they are moving, and the strength of their electric and magnetic fields, even from such distances. We can do this by decoding the message of their starlight. Rich Heuermann will explain how this is done and something about what we have learned about the different types of stars by analyzing the light they emit.

Rich Heuermann is the Outreach Program Coordinator of the NASA Missouri Space Grant Consortium at Washington University. He is also an amateur astronomer and long-time member of the Saint Louis Astronomical Society.

What Are YOU Doing This Summer? *by Jim Small*

I'm retiring at the end of the school year from the public school system, so you would think I would have PLENTY of free time this summer to basically sit around and work on my pathetic house. NOT hardly! I plan on continuing to teach at Meramec next Fall, so I am keeping up with the rest of the nation via conferences, meetings and just plain get-togethers. I run sound for my church, and they are trying to put the summer schedule together. Yikes. I have to list all my weekend conflicts for them... I'll just write them all down here and kill two birds with one stone!

June 4-5 Mid-States Region of the Astronomical League annual conference in Omaha, NE. I'M signed up, are you yet? It looks like a great schedule and the speaker line-up looks terrific. Nothing like a good road trip to start the summer, either. Find more information elsewhere in this newsletter! Sign up by May 20, or

the price goes up and the dorm rooms (what a GREAT deal) won't be available and you'll have to settle for a hotel room.

June 25-26 Astronomical League Conference (ALCON 2010) in Tuscon, AZ. I can't pass this up after spending two weeks in 2007 at the workshop for the Astronomy Research Based Science Education program I attended. There are LOTS of good possibilities for tours there, including Kitt Peak National Observatory (Home of NOAO) and the Mirror Lab at Arizona State. In addition to that, it's the stomping ground for Ed Prather, one of the most dynamic astronomy educators in the business. More on that later. Book this one NOW because hotel rooms are disappearing fast. Lunt Solar Systems is a partner for this conference. If luck holds out, I might be able to snare a tour of the McMath solar observatory on Kitt Peak for some people. I'll have to check.

July 17-21 American Association of Physics teachers annual meeting in Portland, OR. Hey, I'll be at this one, but it might not interest most of you. There will be some astronomy stuff here, but I'm excited about it because they will be having a get together at David Vernier's house, owner of Vernier Software, inc. makers of quality interfaces for computers and collecting data of any kind. Check out Logger Pro for graphing raw data and analyzing it.

July 23-24 Midwest Astro-Imaging Conference in Chicago area. Boy, I'd like to be able to cram this one in... fantastic workshops from premier imagers and the Mac Astronomy Workshop is held simultaneously. More on this one elsewhere in this newsletter.

July 31-Aug 4 Cosmos in the Classroom workshop AND the Galileo Teacher Training workshop (for teachers AND those

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President's Corner *by John Newcomer*



“ Step up and volunteer for a committee. Go to a local school and share your enthusiasm with the students.”



Volunteers are needed to help SLAS fulfill its mission

I'd like to start off this article with a very sincere "thank you" to the members of this society. You have allowed me to serve both our society and the community at large. I count myself among a privileged few to be able to say I've been the president of this society. Most of the highly visible achievements while I've been president have been the result of the work of others. Back in 2006, when we hosted the MSRAL convention, the majority of the work was done by Cook Feldman and Jim Small. Our brush with astronomical fame by visually observing 2003UB313 (<http://mcdonaldobservatory.org/news/releases/2006/0220.html>) was due to the efforts of Louis Berman (then Recording Secretary). When we participated in the Thanksgiving Day Parade in 2008, that was largely Jerry & Karen Loethen and Jim Small. My television debut was due to the work of Joe McHugh. Our pending collaborations with the YMCA and the Arch are due to Don Ficken and Cook Feldman, respectively. There are also many others who have contributed to the successes of the society; I'm very lucky to have served along side these dedicated individuals who are always there to volunteer. *They* make this society great.

At this month's meeting, you have an opportunity to make your voice be heard in how the society will be run for the next year. I will again encourage you to come to the meeting and participate. Step up and volunteer for a committee. Go to a local school and share your enthusiasm with the students. Come to a public outreach event, even without a telescope. Your mere presence will make the event more successful.

During April, we had 11 events scheduled, 5 were clouded out. Of the events we did manage to hold, nineteen volunteers educated and entertained 865 guests for a total of 133 hours! Special thanks and congratulations go to Brent Buch, who earned his first SLAS Buck at the Mark Twain Lake event! We've also seen a rise in redeeming SLAS Bucks for logo merchandise. During April, we have spent more SLAS Bucks that we did in all of 2009! This year, however, has been a poor year for clouds

(actually, it's been an excellent year *for the clouds*). Fully a third of all our events have been clouded out.

On the membership front, we currently stand at 148 members. You may recall our goal of 160 by the end of the year. We'll move up an down throughout the year, and we're aiming to have more "up" than "down"

The speaker at the May meeting will be our own Rich Heuermann, speaking about the information available to us simply by watching the light from distant stars.

Again, our annual election of the executive board will be held at the May meeting. The position for treasurer has two nominees, so we will have some actual "electing" to do! It will be exciting! I'll see you at the meeting!

Show Me Space!

The Space Museum in Bonne Terre is conducting a "Show Me Space" event on June 26th, in Bonne Terre. Ann Boes of the museum says, "We have a wonderful program coming up June 26th called Show Me Space. We invite presenters to come for the day and strut their stuff. We obviously lean toward aerospace types but we have expanded to any science and technology discipline. We also try to have a dignitary or two. We have hosted Dr. Edgar Mitchell the moonwalker, Skylab astronaut Bill Pogue, and shuttle astronaut Dick Richards. This year it will be Dr. Liz Warren from Lockheed Martin who is heavily involved with activities on the International Space Station and Jerry Bostick who was the lead Flight Dynamics Officer through much of the Apollo program and in particular Apollo 13. He was also the technical consultant for the Ron Howard movie of the same name. Somehow we seem to attract some very important people! SLAS has been invited to be represented in some way. Check with John Newcomer about participating in this event in Bonne Terre, MO

Election Season

by John Newcomer

Greetings SLAS members!

As you may be aware, the May General Meeting is when we hold our annual elections for the executive council positions for our society. Quoting from our constitution:

ARTICLE V – MEETINGS

The society shall hold an election of officers during the May regular meeting of each year; elected officers to take office at the following monthly meeting.

All officers and nominees must be members in good standing, and at least 21 years of age. No member shall hold more than one elective office at a time.

As always, nominations will remain open until the evening of the May meeting. The positions open for nomination are:

PRESIDENT The president shall be the executive officer of the society, shall preside over all meetings of the society and the executive council, and shall be ex-officio member of all standing committees.

VICE-PRESIDENT - The Vice-President shall, in the absence of the President, preside over all meetings of the society and of the executive council. He shall perform such duties as usually pertain to that, or which may be assigned to him by the President or the executive council.

TREASURER - The Treasurer shall receive all funds paid to the society and shall deposit same in an official depository as approved by the executive council and shall disburse same on the approval of the President or the executive council. He shall sign all checks. He shall keep the society's financial records and his books shall be open to inspection by the execu-

tive council at all times. He shall make a report at the annual election meeting of the society and at such other times as the executive council may require.

RECORDING SECRETARY - The Recording Secretary shall keep minutes of business portions of any regular monthly meetings and minutes of all executive council meetings.

MEMBERSHIP AND HOSPITALITY - The Membership and Hospitality officer shall maintain a program of securing new members for the society and retaining current members. The Membership and Hospitality officer shall plan and coordinate social activities of the society as requested by the executive council or the membership.

BOARD MEMBER AT LARGE - This position is a three-year term, and is designed to provide continuity of experience to the board. There will be times (such as this year) when a majority of the one-year term positions will need new people to fill them, the board members at large will ensure that at least two board positions will have experience and knowledge of the workings of the board.

As of this writing, the nominees are:

President
Jim Small

Vice President
Rich Heuermann

Treasurer
Brent Buch
Ken Gianino

Recording Secretary
Joe McHugh

Membership and Hospitality
Grant Martin

Board Member at Large (3 year term)
Jim Trull

**“May is when
we hold our
annual
elections for
the executive
council
positions”**

Mid-States Regional Convention Are You Signed Up Yet?

IMPORTANT: Pre-registration closes on May 20th - after May 20th registration increases by \$10. Also May 20 is the last day that you can reserve university housing.

Speakers



[Rob Landis](#) is a NASA engineer with an eclectic set of science and mission operations leadership and hand-on experience ranging from space-based observatories (Hubble Space Telescope, Rossi X-ray Timing Explorer); deep space missions (Cassini-Huygens and the Mars Exploration Rovers - Spirit and Opportunity); and manned spaceflight (International Space Station and shuttle). He has lived in Russia and Germany for extensive periods to support ISS mission operations.

Rob is currently assigned to the Lunar Surface Systems Project at Johnson Space Center in Houston, Texas. In that position, he and a small team worked with the Augustine Committee which reviewed U.S. human spaceflight plans and included near-Earth objects (NEOs) as high-profile destinations in the exploration options put forward to the White House. He has authored several articles on astronomy as well as history of science and technology. His most recent popular article appeared in the May 2009 issue of the Griffith Observer entitled, "NEOs Ho! The Asteroid Option."

[Dr. Pete Schultz](#), Science Coordinator for NASA-Ames Vertical Gun Range. Dr. Schultz was a founding member of the Prairie Astronomy Club. He received his Ph.D. in Astronomy at the University of Texas at Austin in 1972. After working as a research associate at the NASA Ames Research Center, and a Staff Scientist at The Lunar and Planetary Institute, he became an Associate Professor in the Department of Geological Sciences at Brown University in 1984. He was promoted to full Professor in 1994. In addition to his research and teaching responsibilities at Brown, he has served as Director of the Lunar and Planetary Institute Planetary Image Facility, and is currently the Director for both the Northeast Planetary Data Center and the NASA/Rhode Island University Space Grant Consortium.



Rick Johnson is a founding member of the Prairie Astronomy Club and now lives in Minnesota. He built his first scope, a 6" f/12 on a pipe mount, for the Mars opposition of 1954. He took his first astro image shortly thereafter by holding a camera up to the eyepiece and getting a fuzzy image of the moon.

The title of Rick's presentation will be "Imaging at -40°" and will cover temperature-related issues and other things he has had to deal with that he has never mentioned in his popular "Observatory Update." emails.



Larry Stepp is a Lincoln native who was a member of the Prairie Astronomy club in the 1960s and 1970s. He worked on the 3.5-m primary mirror for the WIYN Telescope on Kitt Peak and was Optics Manager of the Gemini 8-m Telescopes project from 1991 to 2001. Subsequently, Larry managed the AURA New Initiatives Office that developed the design of the proposed Giant Segmented Mirror Telescope, one of the three precursor studies for the Thirty Meter Telescope project. He is now the Telescope Department Head for TMT, living in Pasadena, California.

The title of Larry's presentation will be, "A brief history of future giant telescopes". It will describe 30 years of plans and proposals for optical telescopes larger than 10 meters aperture that will finally, in this decade, result in several giant observatories of unprecedented power and precision.

Dave Churilla is a member of the Prairie Astronomy Club. The title of his presentation will be "Why Outreach."

Dave Knisely, also a member of PAC, will present a paper on "H-Alpha solar viewing."

Erik Hubl will present a paper on "Light Pollution."



Planetary Déjà Vu *by Mark Jones*

Planetary discoveries are very much in the news these days. Planets are being discovered around distant stars and Kuiper belt objects as large as Pluto are also being found. But Astronomy was a different place in the 1846. Uranus has been discovered 55 years prior circling the Sun at such a great distance that it took 84 years to circle the Sun. The minor planet Ceres found in 1801 reaffirmed the dominance of Newtonian mechanics as the governing law of the universe. With this as a backdrop, mathematicians Leverrier and Adams worked independently using perturbations in the orbits of the known planets to predict the location of another large world. This work culminated on the night of September 23, 1846 when astronomer Johann Galle using the 9-inch refractor at the Berlin Observatory, found a previously uncharted 8th magnitude "star", within one degree of Leverrier's predicted location. This new planet was later named Neptune the 8th planet. Repeated observation reduced Neptune's orbital period from the 217 years Leverrier had predicted down to its current value of slightly more than 164 years. This means that Neptune will complete its first observed revolution around the Sun in 2010!

Therefore on September 23, 2010, observers can recreate the moment when Galle discovered Neptune as it drifts through the constellation of Aquarius.

Observational note. On September 23 1846 Saturn was less than 1.5 degrees west of Neptune when it was discovered. In July 2009 the planet Jupiter will be in almost the same position relative to Neptune as Saturn was 163 years earlier!

Using standard astronomy software we can go back to that September night in 1846 and examine the same star field that Galle saw when seeing Neptune for the first time. In the 160 years that have past the Earth's precession has shifted the Right Ascension (RA) and Declination (DEC) of the sky.

On the night of September 23, 1846 Neptune was at RA= 21h 53m 17s; DEC=-13D 24m 15s. This places Neptune at the western boundary of the constellation of Aquarius.

"Neptune will complete its first observed revolution around the Sun in 2010!"



FOR SALE!

I have a reasonably nice 8" F4.5 dob for sale. The OTA was built by Al Woods some years ago. I've added the secondary mirror and spider, the dob base, and a Telrad (sorry, I don't have a base for the Telrad).

The scope works well enough and the images are decent. The tube is classic Al, fiberglass painted that odd tan color. I can provide a length of Sonotube if you thing you might want to put the mirror in something different.

I'm asking \$100 O.B.O. Please contact me at jerry.loethen@gmail.com for questions or if you would like to come see the scope. Thanks, Jerry Loethen



4th Annual Midwest Astro-Imaging Conference (MWAIC)

by **Al Degutis**

The fourth annual Midwest Astro-Imaging Conference (MWAIC) and the Mac Astronomy Workshop (MAW) taking place at the NUI Education Center in Hoffman Estates on July 23-24, 2010. NIU Hoffman Estates is located only 20 minutes from O'Hare International Airport.

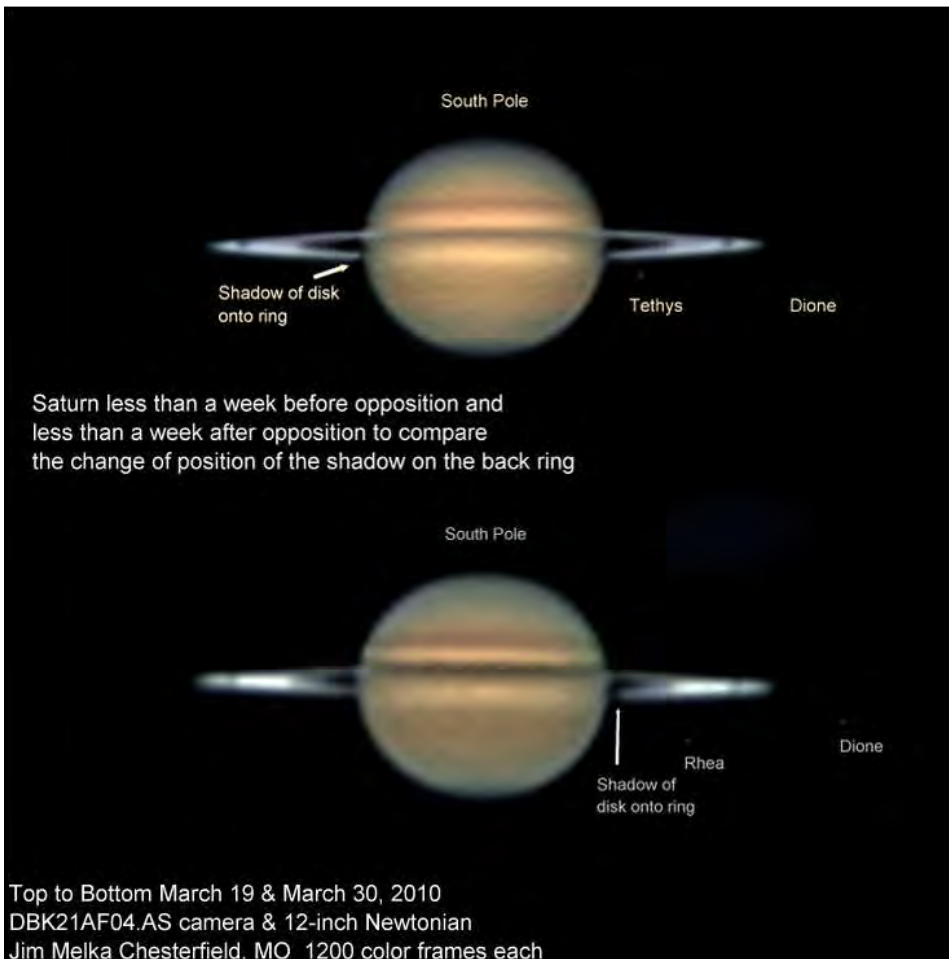
The combined conference will feature experts on the latest in Windows and Mac astronomy and astro-imaging software, as well as platform independent image processing techniques.

The 2010 conference will feature a keynote by Dave Jurasevich of the Mount Wilson Observatory.

Expert speakers will include Adam Block, Ken Crawford, Neil Fleming, Alan Friedman, and workshops by Paul Rodman, Darryl Robertson, Craig Stark, Mike Unsold, Sander Pool, Bob Piatek and others.

We've also added a one-day, pre-conference workshop conducted by renowned imager Adam Block. It will take place on Thursday, July 22, 2010 and sponsored by AstroPhoto Insight Magazine. Adam Block's four-day "Making Every Pixel Count" workshops demonstrate tools and techniques that improve proficiency in processing astronomical CCD images. In this one-day program, he will highlight critical ideas and choices that cover both fundamental data reduction in CCDWare's CCDStack as well as artistic considerations when using Adobe Photoshop. Many of these techniques address typical issues such as gradients, stellar artifacts, smoothing, and handling "weird" data.

This is also a great time to meet with vendors and see their latest products. Exhibitors will include Adobe Systems, DC3 Dreams, Canon, Quantum Scientific Instruments (QSI), Atik USA, Starlight Xpress, Optec Inc, Mike Unsold of ImagesPlus, Mount Lemmon SkyCenter and more.



In addition to the great presentations, workshops, and vendor exhibits, the Midwest Astro-Imaging Conference and Mac Astronomy Workshop offers a catered, hot lunch that surpasses the box lunches at most imaging conferences, free wireless Internet throughout the facility and thousands of dollars of great door prizes.

In previous years, some attendees and speakers have taken advantage of the location and time of year to extend their visit for some sight-seeing in Chicago.

For more information about the Adam Block workshop and the conference visit www.mwaic.com

Clear skies, Al Degutis
Midwest Astro-Imaging
Conference Co-Chair
<http://www.mwaic.com>

(Continued from page 1)

who work with them (can you say OUTREACH?) in Boulder, CO. I'm going, and Rich Heuermann and Rick Menendez are going as well. I also know at least two other astronomy professors from the area that will attend. I attended a weekend version of a workshop put on by the Center for Astronomy Education and presented by Edward Prather and Gina Brissenden, two of the best astronomy instructors on the planet. Not only that, but a real treat to hang out with. They are definitely on the cutting edge for education at the college level. I'll probably try some of the techniques on our meeting at some point next fall! They will also be presenting similar workshops at the AAPT meeting as well as this meeting in Boulder. Their meetings are designed for the college teaching crowd, but the Galileo Teachers meetings held by the ASP are aimed at 3-12 teachers and those of us who work with that level. The activities would be great material for outreach events that SLAS would hold and the workshop will train attendees for the purpose of running those activities. If you think you might be able to get to Boulder, it would be great to see some more people there! Rich, Rick and myself will be looking forward to showing what we gained at the meeting when we get back!

That pretty well wraps up the summer! What's next? Rich Heuermann and myself are planning on hosting a teacher workshop the weekend after we get back from the conference in Boulder. It will be perfect timing, as we will have just completed the workshop and will be charged up to deliver new knowledge to local teachers. The plan is to distribute Galileoscopes and make classroom size kits available for attending teachers to check out to use with their students. In addition, there are other kits we will put together to teach things like optics and other concepts useful. Teachers will be able to check out the kits, use them in their classroom, then return them so other teachers may use the materials.

We also have been getting more toolkits from the Night Sky Network for various topics. The latest kit is for the Solar System and has some good models to use with outreach and a terrific laminated poster with the Sun on one side and a scale model of the solar system on the other. It also comes with two unique devices: One ruler that is scaled to match the poster and has LIGHT MINUTES as the units! You can hold it up to the poster and measure how many light minutes apart various objects are from each other! The other ruler has curves on it that when placed on the appropriate planet's orbit, represents an earth year for that orbit. (how far does Jupiter move around it's orbit in a year?) It's very nicely done.

I'm looking forward to sharing these adventures and new knowledge with our members in the coming year! What are YOU doing this summer? Jim Small

I Want That ! by Jim Small

Yeah, ok, I admit it. I'm a tech junkie. Not as bad as some, worse than most. Something new is out? Something *majical*? I have to try it. So I waited. I waited a bit too long (scared off by the storms on Friday, April 30 when it was released) so I ended up waiting an EXTRA week for it. IT? An ipad of course! I'm into music and photography and I teach, so I bought the big one with 64 gb memory. And since my school doesn't let me connect personal computers to their wireless, I bought the 3G version. ATT runs the service and it's 30 dollars a month, no contract, unlimited data.

Why do I care you ask? Here it is. I currently have 30 astronomy related apps and I haven't had too much time to explore yet. Why an ipad instead of an ipod touch? it's BIGGER. When I'm showing others star maps or moon maps, its huge! What's that crater you ask? Let's blow up Moon Atlas and see! What moons are around Saturn you ask? Let's blow up Saturn in StarmapPro and see! Want a great view of the solar system with current locations of planets in 3D so you can fly amongst them and see the view from anywhere in the solar system? Fire up Solar Walk! What's that star up there? Fire up Sky Spy and point your ipad at the sky... (haven't tried that one yet.. maybe tonight!) What are rise and set times? Fire up one of many ephemeris programs. Exoplanet keeps you ahead of everyone with instant updates for new planets and locations AND links to the papers reporting the data.

There are Hubble picture apps, APOD apps, NASA news apps, Satellite watch apps, Mars atlas, Moon atlas, Moon Globe, Moon Map, Star Walk, Distant Suns, GoSkyWatch, Astronomy Quiz, StarMap3D, Astrocalc to calculate information using your custom input telescope and eyepiece data, PlanetFacts for tons of info about the planets. (what was that question?)

In addition to ALL of this, ipad may be used to view the internet, check email (or dialogs), gps, google earth, maps (WHERE was that dark site again?) space music while you observe and last but not least, a red FLASHLIGHT (might be a bit pricy if that's all you can think of as a use...)

I haven't checked into controlling telescopes yet. That will come soon I bet.

My favorite star program so far is StarmapPro and my favorite Moon program is Moon Atlas. Both have been very handy for use with my classes.

Jim Small

Upcoming Star Parties and Other Events

SLAS Regular Meeting

Date: Friday, 5/20/2010 **Time:** 7:30 PM - 9:00 PM
Location: Room 162 McDonnell Hall, Washington University, Saint Louis, MO

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>

Observing 2010

It's February 2010, time to get ready for this year's observing season. The SLAS dark sky events are scheduled for Saturday nights nearest New Moon. We will plan to use Danville Wildlife Area unless otherwise announced at a later date. Check SLAS-Dialogs and the SLAS calendar for details.

Dark Sky Observing Dates (all are Saturdays)

Jun 12 Jul 10 Aug 7 (Star-B-Q Babler State Park) Aug 14 Sep 4 Oct 9 Nov 6

SLAS OUTREACH EVENTS

You do not have to be an expert or bring a telescope to be of enormous help - we always can use help with crowd control, handing out literature, etc. Contact Star Party Coordinator Michael Malolepszy (314-781-4701 or 314-374-0804 cell or kmichealm@yahoo.com) if you can help. Log into the Night Sky Network to let us know you will be coming and to get automatic updates as to the status of the event.

Currently scheduled outreach events:

May 18 Parkway SW Middle School Rerun
May 19, 2010 (WED) Francis Park Stargazing (May 21, 2010 SLAS Gen. Membership Mtg.)
May 22, 2010 (SAT) Kirkwood park
June 4, 2010 (FRI) SLSC PTV
June 11, 2010 (FRI) Camp Notacotamongus-
June 16, 2010 (WED) Francis Park Stargazing (June 18, 2010 FRI SLAS Gen. Membership Mtg.)
July 2, 2010 (FRI) SLSC PTV
July 14, 2010 (WED) Francis Park Stargazing

July 9/10 2009 (Fri) WOW
Aug. 6, 2010 (FRI) SLSC PTV
Aug. 18, 2010 (WED) Francis Park Stargazing
Sept. 3, 2010 (FRI) SLSC PTV
Sept. 15, 2010 (WED) Francis Park Stargazing
Oct. 1, 2010 (FRI) SLSC PTV
Oct. 14, 2010 (Thur) Bristol Elementary
Oct. 19, 2010 (Tue) Daniel Boone Branch Library
Nov. 10, 2010 (WED) Francis Park Stargazing
Dec. 15, 2010 (WED) Francis Park Stargazing

Details for events scheduled before the June 18, 2010 SLAS meeting:

May 18, 2010 (TUE)

Parkway SW Middle School Rerun (8-9:30pm)

Southwest Middle School, 701 Wren, Manchester, MO 63021

May 19, 2010 (WED)

Francis Park Stargazing

7-10PM Francis Park is located in St. Louis Hills near Ted Drewes. Tamm Avenue at Itaska Street, next to the sidewalk.

May 22, 2010 (SAT)

Kirkwood Park Stargazing

At Kirkwood Park, field #5 (behind the water tower) Adams & Geyer.

June 4, 2010 (FRI)

SLSC Public Telescope Viewing "The Sky Tonight" starts at 8pm.

June 11, 2010 (FRI)

Camp Notacotamongus Living Well Village, 3602 Lions Den Road, Imperial, MO 63052

June 16, 2010 (WED)

Francis Park Stargazing



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. For more information about events, such as Moon phase, clear sky clock, weather report or a map of what's up, see the calendar online.

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, Treasurer

13024 Barrett Crossing Court

St. Louis, MO 63122-4900

e-mail: treasurer@slasonline.org

Check all that apply:

Renewal

Address Change Only

Please send my newsletter by regular mail

New Member!

SLAS OFFICERS

President *John Newcomer* 314-496-4636
 president at slasonline.org

Vice President *Vacant* vicepresident at slasonline.org

Secretary *Rich Heuermann* 314-962-9231
 secretary at slasonline.org

Treasurer *Don Ficken* (636) 225-0269
 treasurer at slasonline.org

Hospitality *Annette Rolls* hospitality at slasonline.org

Board Members at Large:
Jim Trull board10 at slasonline.org

Cook Feldman board11 at slasonline.org

Bill Breeden board12 at slasonline.org

ALCOR Astronomical League Representative *Don Ficken*

Observing Programs *Mark Jones*
 observing at slasonline.org

Club Librarian *Jim Small* 314-909-7211
 librarian at slasonline.org

Loaner Scopes *Linda and John Follis* 636-583-3485
 loaner at slasonline.org

Merchandise *Grant Martin*
 merchandise at slasonline.org

SLASdialogs Moderator *John Beaury* 314-965-9094
 dialogsmoderator at yahoo.com

Star Party Coordinator *Mike Malolepszy* 314-781-4701
 vicepresident at slasonline.org

COMMITTEE CHAIRS

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 telescope at slasonline.org

Publicity—*Rich Heuermann* 314-962-9231
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Dark Site Coordinator *Mark Jones* 636-394-2342
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Webmaster *Jim Small* 314-909-7211
 webmaster at slasonline.org

Newsletter Editor *WE NEED A NEW EDITOR!!*
 newsletter 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

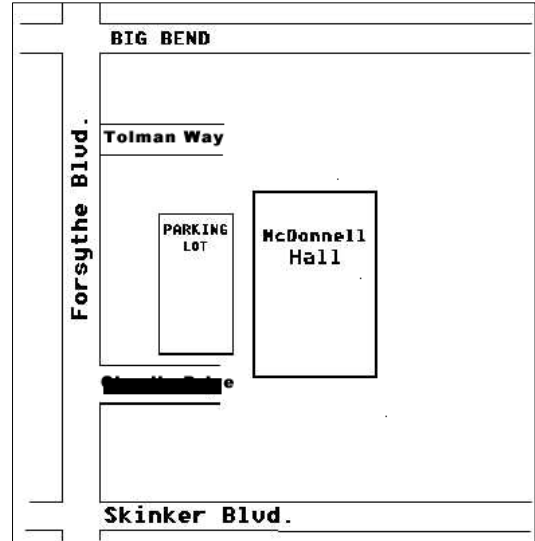
St. Louis Astronomical Society is a not-for-profit organization established in 1936. SLAS is devoted to the interest and advancement of the science of astronomy. Our mission is to promote an understanding of the science of astronomy to our members and to the public. Membership is open to anyone with 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.

SLAS conducts star parties, presentations, holds public monthly lectures frequently with guest speakers and hosts social events for members.

Member benefits include outreach opportunities, loaner telescopes, a library, an online forum and social events such as star-b-q's and dark sky parties. Support for members wishing to further observing or other skills is also available.

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

Jim Small
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St. Louis, MO 63122