

September 2015 Editor - Jack Fritz

The St. Petersburg Astronomy Club, has been the center of family astronomy in the Tampa Bay Area for decades. Its 272 adult members are dedicated to promoting and sharing the wonders and science of astronomy. We host dark-sky and local star parties, telescope-making workshops, science / astronomy lectures, educational outreach sessions and much more.

President's Message

KYLE BRINKMAN

When a person is ambitious they are said to reach for the stars. When you observe someone who is enthralled with someone else you might say that she thinks he hung the moon. There are numerous superlatives that



are common references to stars and planets. Why is it that? Perhaps the stars are extraordinary and the metaphor is to astronomy as something extraordinary.

Astronomers likewise are not ordinary. We are setting up when most people are going to bed. We will stay out on a cold night just for a glimpse of a galaxy. Some of us actually get giddy over counting binary stars and calculating their periods. (I tried that once, it wasn't all that exciting).

Astronomers also challenge assumptions. Sometimes that challenge comes with a cost. Galileo had his trials. Nobody thought Hale's large mirrors would compete with a good refractor until he built it. Then there was Chinese Astronaut Wan Hu. Wan Hu was the first to build a multistage rocket and attempt to get to the Moon. Witness accounts say the gunpowder fueled rockets fired and the chair

Wan Hu was sitting on were soon gone. The records from the sixteenth century don't record if he made the trip.

Go ahead and reach for the stars! Be extraordinary and maybe a little weird. Just be safe.

Noteworthy:

The trip to Patrick AFB is on indefinite hold due to policy changes at the base. They are not hosting tours for the foreseeable future.

New Members

We would like to welcome Mark Whitley and Fred & Diane Friedman to our family of members.

General Meeting

This month's meeting will take place on Friday, September 25, 2015 at $8:00\,PM$, at the Science Center of Pinellas County, 7701 22^{nd} Ave. N, St. Petersburg, FL.

<u>Beginning Program</u> - Kyle Brinkman will welcome guests and make pertinent announcements.

<u>Break & Sidewalk Astronomy</u> - Snack Time plus a walk outside to observe and discuss the night sky.

Main Program - Professor Ruggero Santilli will be speaking about "The Mystery of Detecting Antimatter Galaxies"

Keynote Speakers

September - Professor Ruggero Santilli will be speaking about "The Mystery of Detecting Antimatter Galaxies"

Dr. Ruggero Santilli was born and educated in Italy where he achieved his Ph.D. in mathematics and physics, as well as a chair in nuclear physics at the Avogadro Institute in Turin. Dr. Santilli was a professor at the University of Miami in Florida, Boston University, MIT and Harvard University. Since 1984 Dr. Santilli is the President of and Professor of Physics at the Institute for Basic Research. Dr. Santilli is the author of some 250 technical articles and 18 post Ph.D. level monographs in mathematics, physics, cosmology, superconductivity, chemistry and biology published the world over. Dr. Santilli is the recipient of numerous prestigious prizes. On top of all that, he is also a new member of the St Petersburg Astronomy Club.

October - Annual Meeting & Elections, Pot Luck Picnic and viewing.

November - Auction

December - Winter Solstice Party.

Club Meeting Hurricane Policy

Hurricane season is upon us. We may cancel the meeting if a hurricane is threatening Pinellas County. If that happens, we will send a cancelation notification via email. Alternatively, you may call Allen Maroney at 727 867-4781 or Jack Fritz at 813 508-5680 to check on the status of the meeting.

Member Appreciation

KYLE BRINKMAN

Greg Simpson has been doing the sidewalk astronomy at Gulfport each month. Gulfport has a First Friday street festival

that draws a large crowd each month. Every time that we do a public outreach event there is someone who has never looked at anything in a telescope. This service provides an eye opener to people of all ages. In addition, Greg attends and organizes other outreach events. These events bring exposure to our club and increase the public interest in science. Thank you Greg for all that you do.

Change in Magazine Subscriptions

JIM HUNTER

For decades the SPAC treasurer has received checks for renewals along with Sky & Telescope and Astronomy magazine subscriptions. Those checks require a trip to the bank and a written letter to the publishers to renew the subscriptions. This cost the club; a stamp, envelope and lots of time. It also creates a time delay for the double mailing, and high potential for errors.

In the past the publishers gave members a discount if the renewal came through the club. Now if you mention SPAC on your Sky & Telescope renewal, you will get the same discount. Kalmbach Publishing (Astronomy) has a website where you can renew online.

Since there is no savings to our members, we plan to discontinue this service. We will continue, for tradition sake, until the end of December.

The Astronomy magazine Renewal Key code is RCLUB069. Please use the link below to renew your subscription:

http://subscribe.astronomy.com/ecare

Outreach

JIM HUNTER

\chi Drip, drip, bubble, squish!

In the last two months there have been unique outreach events. Of course the ones at MOSI and my sidewalk evenings were washed out.

I helped a new neighbor set up their scope under minus eight magnitude skies. That is an estimate as we could not see a lighted area in the clouds hiding the moon.

However there were observations made. Aquarius had both vessels pouring water on Pisces so they could swim in the streets. There was an unsubstantiated report of seeing Cetus the Whale.

Personally, I had a problem. Penny bought a shower cap for my Dob, appropriately, but it was translucent so objects did not come to focus. Being older, my night vision takes longer to return. This was disconcerting during seemingly continuous lighting flashes and I had left my lightning filter at home. On a brighter note, there are no mosquitos in the rain.

For you literary types, should we designate a new constellation of Mowgli, the Frog? They were in abundance in the temporary pond in my backyard. We have had about 26 inches of rain from mid-July to the end of August.

I propose a challenge to the creative members like Tom Spano and all the lab guys. Build an eight wave periscope for underwater observing. Alternatively, I visualize a moveable neoprene cover "O-Ringed" to the top of the scope, above the dome slit.

Times are changing. This week we had a nova in our Solar System. I was very encouraged upon seeing a large boat docked in the Bay unloading pairs of animals.

September Astronomical Events

STEVE ROBBINS

First of all, don't forget our lunar eclipse of September 27. Beginning at 20:11, with maximum at 22:47 EDT. This one is ideally situated for sharing with the public. As a bonus, this is the first Supermoon total eclipse in 30 years. A Supermoon is only 11% larger than an average full moon, but is over 30% brighter.

October 2 find the moon half a degree south of Aldebaran.

October 8 the moon will be .8° north of Venus and 2.5° south of Regulus.

October 9 the moon moves over to Mars and Jupiter, coming 4° from Mars and 3° from Jupiter.

Uranus comes to opposition on October 11. The Moon visits Saturn October 16, passing 3.2° south.

October 17 find Mars .4° north of Jupiter.

October 25 Venus will be 1° north of Jupiter.

The Moon will be .6° south of Aldebaran on October 29.

October's full moon is the Full Hunter's Moon, so get hunting up a supply of food before the snows of winter make food scarce!

The Moon

- Third Quarter October 4, 05:06 EDT
- New Moon October 12, 20:05 EDT
- First Quarter October 20, 04:31 EDT
- Full Moon October 27, 08:05 EDT

<u>Learn to Use Your Telescope Observing</u> Night

SHIRLEY VUILLE

Bring all of your telescope, its accessories, and the telescope manual to the Science Center field on Saturday, October 17th. Setup time is 7:00 PM. This will allow time to learn tripod placement, telescope-tripod assembly, finder alignment, scope adjustments, and get familiar with procedures before it gets dark.

The targets for this month will be: Venus, Moon, Saturn, double stars, and star clusters.

Please email Shirley, <u>svuille@aol.com</u>; or John, <u>john@oneilladvertising.com</u> with your questions.

Mirror Lab

Paul McNabb finished building his dew heater controller that Allen designed for us. It came out



real nice as he mounted it in a Pelican case. We should have several of these operational for the next star party.





Dew Controller

Mike Davis is in the final finishing stage with his 12.5" hex-back mirror. Tom Spano has made a replica of the original Newtonian telescope for the club to raffle off.



Our newest mirror maker, Orion McAlavy

We also have our newest baby grinder, Keevy McAlavy's son Orion. More pictures on the mirror lab web page at: http://www.tele-scopelab.com and on Mike Davis's web page at: www.mdpub.com and also on Allen Maroney's web page: www.knology.net/amaroney.

The award winning Mirror Lab welcomes interested visitors to their facility at the Science Center's rear annex. The lab is open on Saturdays between noon and 4:00 pm. Several experienced and skilled tutors are there to give you support, help & instruction. For more information call Ralph Craig 727 384-2086; Paul McNabb 727 345-5713; or Allen Maroney 727 867-4781

If you have any surplus telescope parts, the mirror lab could use them for various projects.

NASA News

STEVE ROBBINS

Orbiting from a height of 915 miles and shooting photos with a resolution of only 450 feet per pixel, <u>Dawn is dissecting Occator Crater</u>, home of Ceres' famous bright white spots. What were very curiously bright splotches are now resolved into "a complex and beautiful gleaming landscape," said Marc Rayman, Dawn's chief engineer and mission director. They are still very curious and scientists are not prepared to render a final verdict on their exact nature.

Not willing to be upstaged, New Horizons has pulled a buffalo out of the hat as it <u>uploads astounding photo after more astounding photo</u> of its Pluto flyby in July. It will take months to get all the photos back and each one proves that Pluto is arguably the most interesting place visited in our Solar System to date.

And don't forget Rosetta, orbiting our favorite unpronounceable comet, 67P/Churyumov-Gerasimenko. Actually, news has been slow from Rosetta since perihelion day in August. Then this morning a wonderful blog post appeared about the situation with Philae. It's

much too complicated to do justice to here and it's really worth the trouble to read—best release ever from the Rosetta team in my opinion.

For Sale

Orion XT10 Intelliscope Dob with hand controller, viewfinder, 2 eyepieces, upgraded 2 inch, 2 speed, low-profile focuser, cooling fan, solar glass sun filter, light shield, padded scope case, storage cover and custom elevation stand. \$599. Excellent condition.

Contact Scott Walsh at (727) 378-4355 or sawmann55@yahoo.com.

Steve Robins has a Coulter 17.5" mirror set, never used for \$700. You may contact him at Steve_Robbins@cfl.rr.com or (386) 736-9123.

Dark of the Moon weekend for September

KELLY ANDERSON

Dark of the Moon weekend for September was dark ... and wet ... but nonetheless we had a great time. Joe Canzoneri, Ron Wayman, Chris Curran, Jack Fritz, Franklin Matos and I watched the clouds and rainstorms pass over for much of the time, but there were breaks in which the rumors were confirmed: there are indeed stars above the clouds!



Franklin's Proof of Stars

Here's a shot taken by Franklin (single shot, unguided, 50mm F1.2 lens, 15 seconds, ISO 800) through a break in the overcast. You can see some slight nebulosity, but this is of

the cirrus kind. Even though there was a high, thin overcast Franklin shows us that you can still get some fun images with a little processing in Light Room.

Joe was able to prove that you can combine astro photography and meteorology together in the photograph below. I can see three stars in spite of the clouds.



Joe's Night Sky

Then there is this purely meteorological photograph. Notice the stair-step pattern created by the lightning.



Joe's Meteorology

The hydraulic pump on Ron's motor home decided to take a vacation, so he had to manually close the slide-outs with a little help from his friends (strong backs, we got).

Chris brought his Porsche fun machine (no, he didn't pull his travel trailer with it ... his friend Melanie drove it separately) for all to admire. Great machine, but you can't put a trailer hitch on it. Sigh.

I got to set up my newly acquired Kendrick Stargate II Astronomical Observatory for the first time. My telescope (C8 mounted on an Advanced VX plus guide scope, etc., etc.) fit nicely, and the rain cover worked to perfection. When it's not raining, the top opens completely and the telescope pokes out, just like Mt. Palomar. Well, not exactly like Palomar, but close enough. I'm looking forward to using it at OBS in space-heater comfort! After I use it a few times I'll share my experiences in a review, but initially I'm impressed.



Kelly's new portable observatory

Our next DOTM weekend will be Oct 9 - 11, and you have my personal guarantee (for what it's worth?) that we'll have excellent seeing, and the temperature will be perfect for armchair sky watching. Or not. Come out and take your chances with the rest of us. We really have to good time on these outings.

SPAC Business Meeting



The Business Meetings are normally held on the second Wednesday of each month. Our next meeting is Wednesday, October 14th, at 8:00 PM at the Science Center. All interested members are invited to attend. All club business decisions are made at the business meeting so as not to encumber the general meeting.

Officers & Directors

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Click on the name to send email

Recognition of Patrons & Benefactors:

Clifford B. Benham	Benefactor	
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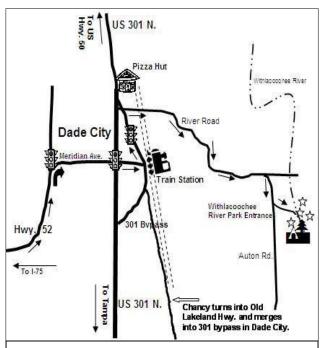
Withlacoochee New Moon Weekend (Cont.)

Our next New Moon Weekend falls on October 9^{th} and 10^{th} .

The park gate is locked at Sundown, so you will need to arrive before then. The year-

round camping fee with electrical use is \$10/night for club members, and \$20 for non-members. Tent camping without electric is \$5/night.

Be reminded that if you are not camping, you must pay the \$2/vehicle fee. Vehicles displaying the handicap parking tag are exempt. For further information, contact Bill or Nancy Huff. starhopr3@msn.com or 813 621-3606.



Withlacoochee River Park - Dade City, FL
Detailed directions can be found at:
www.StPeteAstronomyClub.org



15406 Stonecreek Lane Tampa, FL 33613

SPAC, INC. MEMBERSHIP INFORMATION

Membership in St. Petersburg Astronomy Club, Inc. is open to anyone, regardless of age, who is interested in astronomy. Dues are considered donations and are non-refundable. Membership options are available as listed below:

To join or renew your membership:

Complete the following form and return it with your payment to: Jim Hunter - Treasurer, 17316 Oak Ledge Dr., Lutz, FL 33549-7626 - Telephone number (813) 909-7013 (checks should be made payable to SPAC, Inc.)

Name:		Telephone Number:				
Spouse: _			Children (<i>Unde</i>	er 18):		
Address:			City:		St	Zip:
E-Mail add	dress:	:		Newsletter Preference:	Email []	US Mail []
Single:	[]	\$ 20.00/YR.	Includes one adult, minor children, the 'leges of membership.	'SPACE" newsletter, and	d all the rig	ghts and privi-
Family:	[]	\$ 25.00/YR.	Includes two adults, minor children and	the above rights and private	vileges.	
Patron:	[]	\$ 50.00/YR.	A Patron member is entitled to the above	e rights and privileges.		
Benefactor	r: []	\$100.00/YR.	A Benefactor member is entitled to the a	above rights and privileg	es.	