

August 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

Ever notice how kids don't seem to pay attention to anything. They stare at their phones and plug in earphones just tuning out the world. They have thousands of songs streaming into their ears. They have video games every-



where they go. They are always fiddling with something and never just enjoy their surroundings.

In my youth we had to flip the tape in our Walkman to play only one song at a time. Video games cost a quarter until the Atari put them in every home. We had to walk yards to change the channel on the TV. Maybe things haven't changed that much since 1980. I think my parents had the same complaints.

There is one thing hasn't changed and is unlikely to change. Kids remember the caring adults in their lives. Today's kids remember their favorite teachers and mentors. This is why public outreach is so important for us as a family astronomy club. These kids may see better pictures online than through a scope, but they won't have the benefit of knowing that until someone is kind enough to share a

look. How many of us can think of a person who shared their love of astronomy?

The kids know not to believe everything they see on the internet, and they are right to be skeptical. But looking through a telescope and seeing something with their own eyes makes everything real.

New Members

We would like to welcome Shelly & Franciose Bailey, Jeffrey & Sara Wayman, Lindsey & Alyssa McKeown, Jack O'Hara, Tommy & Amy Ming, and Bill & Cherie Larson to our family of members.

General Meeting

This month's meeting will take place on Friday, August 28, 2015 at 8:00 PM, at the Science Center of Pinellas County, 7701 22nd Ave. N, St. Petersburg, FL.

<u>Beginning Program</u> - Kyle Brinkman will welcome guests and make pertinent announcements followed by Mike Davis seeking volunteers for the Nominating Committee.

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

<u>Main Program</u> - Go See the Eclipse by Chap Percival.

Keynote Speakers

August - Chap Percival author of Go See the Eclipse and Take a Kid with You. Books and T-shirts will be available for purchase at the meeting.

Chap Percival is a lifelong educator with a passion for sharing his knowledge of astronomy. Born in Scranton, Pennsylvania, he holds a BA in mathematics and physics from Taylor University, an MAT in planetarium education from Michigan State University, and an MEd in instructional technology from the University of Virginia. He has been an astronomy educator since 1969 as a classroom teacher, club sponsor, and planetarium director, including teaching high school astronomy since 1995 at Pine View School in Osprey, Florida, one of the top schools in the nation. He has published newspaper articles, been interviewed on radio, and volunteered with the National Park Service as a sky interpreter. He's also given an astronomy talk at the Grand Canyon Star Party and led groups to view five different total solar eclipses.

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 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

Public outreach is the theme for this month in SPAC. There is no better time to thank our own Jim Hunter for all his work arranging outreach with schools, libraries and other venues that would have us. Jim has been our public outreach coordinator, treasurer, and a valued member of the club for over ten years. Last month Jim entertained us with his insights on how to reach the younger generations. Thank you Jim for all you do. Exposure to science is a great way to bring the next generations back to reality.

August Astronomical Events

STEVE ROBBINS

September 4th, Mercury will be at its greatest elongation of 27.1° east of the Sun, and rising before sunrise.

September 5^{th} finds Aldebaran .6° south of the Moon.

September 10^{th} Venus will be 2.9° south of the Moon.

September 13th there will be a partial Solar eclipse not visible for us in Central Florida.

On the 18^{th} , Saturn will be 3.1^{o} south of the Moon.

September 24th, Mars will be .8º north of Regulus.

September 27th, we have a full lunar eclipse. First contact with umbra 21:07 EDT, second contact, totality begins 22:11 EDT, totality ends 23:23 EDT, last contact 00:27. Times are approximate and depend on longitude.

September's full moon can either be the Full Corn Moon or the Harvest Moon, depending on whether it, or October's full Moon, is closest to the Autumnal Equinox. This year the Autumnal Equinox is September 23rd and the full moon is on the 27th, so the September full Moon is the Harvest Moon.

The Moon

- Third Quarter September 5, 05:54
- New Moon September 13, 02:41
- First Quarter September 21, 04:59
- Full Moon September 27, 10:50

Learn to Use Your Telescope Observing **Night**

SHIRLEY VUILLE

X Bring all of your telescope, its accessories, and the telescope manual to the Science Center field on Saturday, August 29th. 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, svuille@aol.com; or

John, john@oneilladvertising.com with your questions.

Mirror Lab

Paul McNabb finished his 10" f/6 Black Vitrified Ceramic mirror. This is a mirror blank he had for a long time that he got from





Canada and finally got around to finishing it. Congratulations Paul!



Paul with his finished mirror.

Mike Davis is in the final finishing stage with his 12.5" hex-back mirror. Several of us have soldered up the dual channel dew heater controllers that Allen designed for the lab crew. We should have several of these operational for the next star party. Tom Spano has made a replica of the original Newtonian telescope for the club to raffle off. More pictures on the mirror lab web page at: http://www.telescopelab.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

Dawn is using its ion engine over the next several weeks to <u>descend from mapping</u> <u>orbit</u> 2 at 1500 miles down to mapping orbit 3, 900 miles. We have new names for features and the crater containing the principle white spots is now called <u>Occator Crater</u>. This is featured in a <u>Cruise over Ceres</u> new video.

Rosetta made quite a splash with renewed contact with lander, Philae on June 13. They regained contact again <u>June 14, 19, 20, 21, 23, and 24</u>, then <u>again on July 9</u>. However since then there have been no further contacts. On July 10 - 11, Rosetta descended closer to the comet to search but lost star fixes necessary for navigation. It was moved to a <u>safer distance of 170 - 190 km</u>, and a <u>huge dump of photos</u> was provided for our amazement at the strangest topography ever imaged.

New Horizons information can be seen at the control panel on their excellent educational site. Interestingly, Pluto shares an important characteristic with Earth, its atmosphere is predominately nitrogen! Atmospheric studies have been featured lately. Of interest is a NASA site called <u>Pluto Time</u>. There you can find out local time where on a clear night illumination at your house is the same as Pluto at noon and take a photo to send to NASA.

And I just discovered a brilliant explanation for the Moon's mysterious two hemispheres: how and why they are so different and why it is the Earth-facing hemisphere with its seas and "new" terrain vs the far side with no seas at all and much thicker crust. It has to do with the ever increasing distance between the two bodies, the ever lengthening Earth day and the formative processes early in the solar system's history. Fascinating!

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.

Withlacoochee New Moon Weekend

KELLY ANDERSON

This month's Dark of the Moon gave us an almost uninterrupted view of the bottoms of clouds, except during daylight hours. That's when it got hot and steamy. Ron & Dee Wayman, Joe & Penny Canzoneri, and I nevertheless had a very enjoyable and sociable weekend. Roger Mitchell came out Saturday to help get my GEM working again after Celestron returned it from repair. It seems my USB/Serial adapter was inoperative. Joe loaned me his and everything worked perfectly. Now if only we can get some stars!

The Saturday afternoon rainstorm arrived right on schedule and gave us a real show. I noticed the frogs were moving to high ground! The paper says we got almost 2 $\frac{1}{2}$ inches of rain. Even so, the field was in fine condition the next morning. We really have a great dark site.

September promises to be an improvement ... it probably won't be nearly as hot or as cloudy as August, and seeing should get better and better as we approach the Orange Blossom Special next March. At least, that's what I've read. So all you tent observers should dust off your equipment and join us September 12 & 13 for the next DOTM. And all you RVers, what better way to spend a weekend?

SPAC Business Meeting



The Business Meetings are normally held on the second Wednesday of each month. Our next meeting is Wednesday, September 9th, 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

President: Kyle Brinkman 727 455-6931 Vice Pres.: Jack Fritz 813 508-5680 Paul McNabb Secretary: 727 345-5713 Treasurer: Jim Hunter 813 909-7013 Mike Davis Dir.-at-Large: 727 474-6785 David Pearson 727 791-4241 Dir.-at-Large: Allen Maroney 727 867-4781 Dir.-at-Large: Jack Fritz SPACE Editor 813 508-5680 John O'Neill **Public Relations** 727 637-5945 Shirley Vuille 727 864-2624 Membership Chair Outreach Chair: Jim Hunter 813 909-7013 Librarian: Ralph Craig 727 384-2086 Chris Curran Club Webmaster: 813 653-2604

Click on the name to send email

Recognition of Patrons & Benefactors:

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Assistant Editor	Nancy Huff	813 621-3606
Mirror Lab	Ralph Craig	727 384-2086

Withlacoochee New Moon Weekend (Cont.)

Our next New Moon Weekend falls on September 11^{th} & 12^{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>Under 18</i>):							
Address:			City:		St	Zip:		
E-Mail ad	dress	s:	Newslette	er Preference:	Email []	US Mail []		
Single:	[]	\$ 20.00/YR.	Includes one adult, minor children, the "SPACE" releges of membership.	newsletter, and	d all the ri	ghts and privi-		
Family:	[]	\$ 25.00/YR.	.00/YR. Includes two adults, minor children and the above rights and privileges.					
Patron:	[]	[] \$ 50.00/YR. A Patron member is entitled to the above rights and privileges.						
Benefacto	r: []	\$100.00/YR	A Benefactor member is entitled to the above right	s and privileg	ges.			
		OPTION	AL DISCOUNTED MAGAZINE SUBSCRIPTIONS AS A BENEF	TIT OF MEMBER	RSHIP:			
Sky & Tel	esco	pe Magazine:	[] \$32.95/Yr.	Astronomy	Magazine	e: [] \$34.00/Yr		