

June 2017 Editor - Jack Fritz

The St. Petersburg Astronomy Club, has been the center of family astronomy in the Tampa Bay Area for decades. Its 269 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 lectures, astronomy lectures, educational outreach sessions and much more.

## President's Message

KYLE BRINKMAN

Last month I had the privilege of accepting an invitation to the US Air Force War College National Security Forum. The invitations are given to 200 civilian community leaders from across the nation.



The purpose is to bring in a variety of opinions on current issues facing our nation from outside of the military. They briefed us on the issues and then held discussion groups to hear our responses. I even had the opportunity to meet and question the AF Chief of Staff.

I learned one of the most amazing things about our country was spoken in anger by a Russian general. The conference speaker had to explain to the Russian general that the missile defense system being installed in Poland was to defend Europe against Iranian missiles and could not possibly defend against a Russian ICBM. The general slammed his fist on the table and said "We put one small satellite in orbit and you people went crazy. You put a man on the Moon within ten years. America always invents a way out of a problem." He was right. American ingenuity is one of those things that make America the great nation it is. The benefits of peaceful space exploration

have real world ramifications right here on Earth.

We also have some local ingenuity that just delivered big results. Dr. Antonio Paris of MOSI, St Pete College and a member of SPAC has just published the results of his study of the Wow Signal. The story started at Ohio State University in 1977 where a strong signal was received on their radio telescope, and then it went away. Nobody knew what the signal was at the time. Therefore, it must be aliens. Then, for 40 years we went crazy and pointed radio telescopes everywhere looking for more. Dr. Paris put his ingenuity to work through study, crowdsource funding, and deductive reasoning provided a more probable solution. His paper is published at Washington Academy of Sciences

Congratulations are in order for Dr. Paris. Those of us who hope to one day find those little green men will just have to wait a bit longer.

Almost all the content of the National Security Forum is not astronomy related. I'll be posting my reflections on my personal Facebook page or can email them directly if you are interested.

#### **New Members**

Unfortunately, we had no new members join in May.

### General Meeting

This month's general meeting will take place on Friday, June  $23^{rd}$ , at 8:00 PM, at the Science Center of Pinellas County, 7701  $22^{rd}$  Ave. N, St. Petersburg.

<u>Main Program</u> - Cosmic Odyssey: Dark Energy, Dark Matter, Distant Worlds, and Time. Presented by Chris Vuille.



Chris is Shirley's brotherin-law, a theoretical physicist, a professor at Embry-Riddle in Daytona Beach, and College Physics textbook author.

## Save the dates, February 7th - 11th

# Orange Blossom Special

Your star party committee is working hard to put together another great event. Go to <a href="https://www.OrangeBlossomSpecial.org/">www.OrangeBlossomSpecial.org/</a> for more information.

# 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 cancellation 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.

#### Hillsborough Outreach

JIM HUNTER

I did the Solar System program at Brooker Creek Preserve. Jack was going to set up the solar scope, but it was cloudy.

There were 72 signed up (one of their biggest registrations) and over 60 attended. Many had never been to Brooker. Not too many questions but they were interested. All age groups were there. I also gave them a quick overview of the eclipse information. I sold three solar viewers and have 22 still available if anyone wants them.

Brooker has set up a star party Saturday 2/17/18. That is during the Fair, which I work at Cracker Country, so I may not be able to attend.

#### National Weather Service

SHIRLEY VUILLE

The Atlantic hurricane season lasts from June to November and peaks between



August and October. Everyone should make plans how to deal with these severe storms now, before the season begins.

Click this link to view and print their booklet, <u>How to Prepare for a Hurricane</u>.

## July Astronomical Events

STEVE ROBBINS

Saturday, July 1<sup>st</sup>, find Jupiter 2.9<sup>o</sup> south of the Moon.

Thursday, July 6th, the Moon is at apogee, 405,900 km away. Also find Saturn 3.6° south of the Moon.

Sunday, July  $9^{th}$  Mercury will be .1° north of the Beehive Cluster with a full Moon.

Wednesday, July  $19^{th}$ , Aldebaran will be .4° south of the Moon.

Friday, July 21<sup>st</sup> the Moon is at perigee, 361,200 km away.

Tuesday, July 25<sup>th</sup>, find Mercury .9° south of a very thin crescent Moon, and Regulus .9° south of Mercury.

Thursday, July 27th is the peak of the Delta Aquarid Meteor Shower with a peak ZHR of about 20. Delta Aquarids are medium speed meteors with tiny meteors most abundant. The waxing crescent Moon will set early, and this could well be a good one.

July's full Moon is the Full Buck Moon or Full Thunder Moon. In central Florida, thunderstorm capital of the world, Full Thunder Moon is most appropriate!

## July's Moon Phases:

- > 9th Full Moon
- > 16th Moon at Third Quarter
- > 23<sup>rd</sup> New Moon
- > 30th Moon at First Quarter

### May's Dark of the Moon

KELLY ANDERSON

The Memorial Day weekend turned out to be pretty good for observing at our dark site, the Withlacoochee River Park just outside Dade City. It also corresponded with a "super moon," where the moon was at perigee. Unfortunately, it wasn't as dramatic as most super moons because it was a new moon, and we couldn't see it!

Joining us on Friday were the usual suspects, Joe Canzoneri and Ron & Dee Wayman, as well as Colin Davis, Shane Eigell, Mike & Carli Partain and their friends John & Chris Ceasack. The day was cloudless and hot, followed by a crystal-clear night with rapidly falling temperatures bottoming out in the low 60's. About 9 o'clock we went from air conditioning to heating with the flick of a switch. At least, those of us with RVs did. Others transitioned from fans to jackets.

The sky was cloudless all night, but not the best seeing apparently because of high moisture content in that soup we call "atmosphere." Nonetheless, we had a great night enjoying the cosmos. Joe had a great night of imaging. Be sure to check out his postings on our club's Facebook page. I was trying something new, but it didn't work out (embarrassingly, the eyepiece, Barlow, and tele-extender kept falling out), and by the time I gave up on that I was too pooped to reconfigure, so I enjoyed other people's eyepieces. That's the great thing about our club events ... you don't need to bring anything to enjoy our wonderful hobby.

Saturday was a repeat of Friday, with hot daytime but no clouds at all. Seeing was about

the same, and unlike Friday my equipment was working fine, and I got good images of Omega Centauri and M4. Jim Hunter, Wayne Beck, and Michael Hires joined us, and we enjoyed another night of cloudless skies with OK seeing. The atmosphere was still a bit soupy.

Sunday attendance was much lower than the previous days. It must have been something we said ... everyone but Ron, Joe and me left, so our little Astro village shrunk to just the hard-core. In all fairness, I'm sure lots of our stalwarts had family plans for the Memorial Day weekend. In case you missed it, be sure to hug a veteran. I'm available.

Fair weather cumulus clouds made their appearance early Sunday morning and stayed all day, dissipating in the early evening hours. We then had about 50% cloud cover with a high layer of stratus, but that cleared up by about 11 o'clock, and we had good seeing until the fog moved in at the early hours.

Summer gets a bit rough for astronomical activities. Temperatures climb, the nights are shorter, vacations beckon. But if you're so inclined, join us for the New Moon weekends. I hope everyone has plans for the total eclipse of the sun on August 21. I hope everyone has clear skies for this incredible event.

#### Space Exploration News

STEVE ROBINS

With Ceres at opposition, Dawn exactly on a line between Ceres and the Sun, Dawn composed a video of Ceres rotating below, fully illuminated. Taken from an altitude of 12,000 miles, Dawn found Ceres dimmer than was predicted. The brightness gain is related to the size of surface particles and their porosity.

Cassini, meanwhile has uncovered evidence that Saturn's ocean moon Enceladus may have had an upsetting incident in its past, causing the planet's axis of rotation to change by more than 55°, more than halfway to rolling

over on its side. That notion is supported by fractures in the ice and regions that look like they were the original north and south poles.

Finally, lest you be underwhelmed by Juno's Jupiter expedition, watch <u>this video</u> of Perijove #6 and wonder why were so blown away by the Voyageur shots so long ago. Be speechless once more!

RALPH CRAIG

#### Mirror Lab

We had our Memorial Day/weekend picnic again this year at the mirror lab. Some people from years past came by and helped eat our feast.



Memorial Day Picnic

We have a new grinder this month, Collin, who has started an 8-inch, f/5 mirror. He already has several telescopes but wanted to learn the art of mirror making.



Kelly the super-tech

Kelly also stopped by and built one of the dew controllers designed by Allen.

Allen is in final polishing of his 16-inch thin mirror. Paul and Ron are still working on their 14-inch mirrors re-melted by Mike from 12.5-inch blanks. Dimitri is about ready to start polishing his 12-inch. Jean-Paul is also coming over from Orlando to work on his 10-inch mirror every chance he can get. Brad has finally returned to finish his 10-inch mirror after disappearing for a while due to a new house purchase.

We are getting into vacation season, and several members are starting to run away on trips for the next several months. Pictures are on the mirror lab web page <a href="https://www.tele-scopelab.com">www.tele-scopelab.com</a> and Mike Davis's web page at <a href="https://www.mdpub.com">www.mdpub.com</a> and also on Allen Maroney's web page <a href="https://www.knology.net/amaroney/">www.knology.net/amaroney/</a>.

## For Sale

Rich Freed, a long time SPAC member is downsizing and would like to sell his 10-inch, f/5, hand-made Dob. You can contact him at (352) 259-2905 or <a href="ref42bbf@comcast.net">rcf42bbf@comcast.net</a>.



In addition to the telescope itself, he has a Sky Commander, Hotech SCA Laser Collimator, some very nice eyepieces, and lots of books. There is too much to list it all here, so you will need to contact him. He would like to sell all as a single package

## SPAC Business Meeting



Our next meeting is Wednesday, July 12<sup>th</sup>, 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 |
| Secretary:       | Shirley Vuille       | 727 864-2624 |
| Treasurer:       | <u>Jim Hunter</u>    | 813 909-7013 |
| Dirat-Large:     | John O'Neill         | 727 637-5945 |
| Dirat-Large:     | David Pearson        | 727-215-1526 |
| Dirat-Large:     | <u>Allen Maroney</u> | 727 867-4781 |
| SPACE Editor     | Jack Fritz           | 813 508-5680 |
| Public Relations | John O'Neill         | 727 637-5945 |
| Membership Chair | Shirley Vuille       | 727 864-2624 |
| Outreach Chair:  | <u>Jim Hunter</u>    | 813 909-7013 |
| Librarian:       | Ralph Craig          | 727 384-2086 |
| Club Webmaster:  | Chris Curran         | 813 653-2604 |

# Recognition of Patrons & Benefactors:

Click on the name to send email

| Clifford B. Benham    | Benefactor |
|-----------------------|------------|
| Jack & Roni Fritz     | Benefactor |
| Alexie & Yanira Velez | Patron     |
| Andy Demartini        | Patron     |
| Anthony Staiano       | Patron     |
| Brad Perryman         | Patron     |
| Gustav J. Waffen      | Patron     |
| Joe Ortiz-Bradley     | Patron     |
| Kyle Brinkman         | Patron     |
| Matt Labadie          | Patron     |
| Robert Myers          | Patron     |

#### **Examiner Staff**

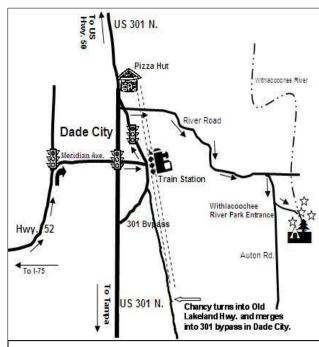
| Editor           | Jack Fritz     | 813 508-5680 |
|------------------|----------------|--------------|
| Assistant Editor | Nancy Huff     | 813 621-3606 |
| Reporter         | Kelly Anderson | 813 672-2751 |
| In the News      | Steve Robbins  | 386 736-9123 |
| Mirror Lab       | Ralph Craig    | 727 384-2086 |

#### Withlacoochee New Moon Weekend

Our next New Moon Weekend falls on June  $23^{rd}$  through the  $25^{th}$ .

The park gate is locked at Sundown, so you will need to arrive before then. The yearround 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. <a href="mailto:starhopr3@msn.com">starhopr3@msn.com</a> 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  | :            | Newsletter Preference: Email [ ]   | US Mail [ ] \$25 |  |  |  |
| Single:    | []     | \$ 30.00/YR. | Includes one adult, minor children, the "SPACE" newsletter, and all the rileges of membership. | ights and privi- |  |  |  |
| Family:    | []     | \$ 35.00/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.                                |                  |  |  |  |
| Benefactor | r: [ ] | \$100.00/YR. | A Benefactor member is entitled to the above rights and privileges.                            |                  |  |  |  |
| IIS Mail   | r 1    | \$ 25 00/YR  | Please include \$25 if you choose to have the newsletter via US Mail                           |                  |  |  |  |