



November 2018

Editor -Jack Fritz

The St. Petersburg Astronomy Club has been the center of family astronomy in the Tampa Bay Area for decades. Its 246 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

★ Thanksgiving is a uniquely American holiday. This day is set aside for the gratitude of immigrants who came for a better life. The traditional story is about the pilgrims who were helped by the native people. The Spanish settlers in St Augustine had been celebrating thanksgiving for 56 years before the arrival of the Mayflower. The French Huguenots in what is now Jacksonville celebrated the first thanksgiving one year before the Spanish in 1564. Had Florida been one of the 13 original states we could be serving alligator at Thanksgiving.



Immigrants in those days had great peril to move to America. What they brought with them established a nation that has had unsurpassed achievements in the science of Astronomy. Who else would build the largest telescopes, the first space telescopes and soon the 30-meter telescope. That success is largely due to immigrants. Even our native-born astronomers come from immigrant families. Forbes magazine published an article about Nobel Prize winners that says 33 of 85 American winners are immigrants.

Remember Dr Misconi the Iraqi professor from UCF who spoke to our club. His book, *An Immigrant's Journey Into the Cosmos*, includes stories of his travels and difficulties getting to the USA. My Astronomy professor at FSU, Dr. Vasken Hagopian, was from Beirut. He was responsible for the discovery of a subatomic particle. The list of influential immigrants would be extensive if we were to make it. Names like Von Braun, Zwicky, Einstein, Bethe, Bohr, and Dollond (inventor of the achromatic lens) are some of the more famous.

When you are observing the holiday in your own way be sure to remember the contributions of America's immigrants. We can be truly grateful for the opportunities our country has to offer and be happy for the success of our immigrant communities.

### New Members

We would like to welcome Antonio Paris back to our family of members.

### General Meeting

This month's general meeting will take place on Friday, November 16<sup>th</sup> at 8:00 PM, at St. Petersburg College, Gibbs Campus. 6605 5<sup>th</sup> Avenue North. **Note: Please note we meet on the third Friday in November and December.**

## Orange Blossom Special

★ Our annual star party, Orange Blossom Special, will be January 30<sup>th</sup> through February 3<sup>rd</sup>. This is the only New Moon Weekend of the year that you must register to attend. Registration is open and available online only. Go to <https://www.stpeteastronomy-club.org/obs.php> for details and registration.

### Withlacoochee River Park Clubhouse

JACK FRITZ

★ Work on our clubhouse continues. When completed, our members and guests will have a comfortable place to gather and sleep during our New Moon weekends and for the annual star party.

We are seeking donations to fund the project. Donations of \$100 or more will be recognized on our dedication plaque. You may donate online for our [website homepage](#) or mail a check to SPAC, 17316 Oak Ledge Dr, Lutz, FL 33549.

### National Weather Service

SHIRLEY VUILLE

★ Volunteer as a NWS SKYWARN Spotter. Training opportunities take place through the winter months online or in-person classes. More information: <https://www.weather.gov/tbw/skywarn>



### December Astronomical Events

STEVE ROBINS

Sunday, December 9<sup>th</sup> Saturn is 1.2° south of the Moon.

Wednesday, December 12<sup>th</sup>, the Moon is at apogee, 405,200 km from Earth.

Friday, December 14<sup>th</sup>, most likely your favorite meteor shower, the Geminids, when the waxing crescent moon sets early and the sky is dark during prime time. Up to 120 ZHR for this spectacular shower.

Saturday, December 15<sup>th</sup>, Mercury is at greatest elongation, 21.3° west of the Sun, rising before it in the morning sky.

Friday, December 21<sup>st</sup>, Aldebaran is 1.7° south of the Moon while Jupiter is .8° north.

Monday, December 24<sup>th</sup>, the Moon is at perigee, 361,100 km from Earth as the Beehive Cluster is .6° north.

December's full moon has two names. Because I'm an amateur astronomer, I'm going to pick the one that means most to me, the Full Long Nights Moon. Nuff said.

### December Moon Phases

- 7<sup>th</sup> - New Moon
- 15<sup>th</sup> - First Quarter
- 22<sup>nd</sup> - Full Moon
- 29<sup>th</sup> - Third Quarter

### Mirror Lab

RALPH CRAIG

★ Many of us have recently finished mirrors and are now working on finishing telescopes for them. We're hoping to have them ready for the OBS star party. Allen is leading the way. He is about half way finished with his 16-inch. Paul is also working on a 16-inch and has promised to have it ready this year. Brad is finalizing the details on his steampunk design 10-inch that he built last year and now has time to "wrap it up". Bill finished his 10-inch mirror a couple months ago and is slowly rounding up parts to put it together. Ron has pretty much finished his 8-inch f/3 and should be putting it in a telescope to test it out soon. Dimitri has been



doing some final finishing of the 10-inch telescope he built a little while ago. I'm slowly working on a 12-inch to try and possibly have it ready this year.



Paul cuts circles



Paul smiling



Brad sands altitude bearing

We still have a couple that are grinding mirrors but they are taking a break right now. Dave Pearson is still rough grinding his 12.5-inch he started before he went on vacation and Dennis Farr is grinding his 8-inch mirror but is taking a break from the summer heat.

Pictures are on the mirror lab web page at; <http://www.telescopelab.com>, Mike Davis's web page at; <http://www.mdpub.com/> and Allen Maroney's web page at; <http://www.knology.net/amaroney/>.

### **November New Moon Weekend**

KELLY ANDERSON

★ Even though the Clubhouse Work Team was scheduled to start on the morning of Thursday, November 1, the sketchy weather forecast prompted your intrepid

Field Reporter to run out to the Withlacoochee River park a day early to see if, at long last, some stars could be seen. Sure enough, Wednesday turned out to be breathtakingly clear. I was happily imaging celestial objects until the radiation fog appeared in the wee hours. Tune in to the Club's Facebook page where I'll be posting some of these images in the near future.

Thursday morning Jack Fritz and Tom Spano arrived ready and eager to continue work on the rehab of the clubhouse. Richard and Mary Garner joined us with their new motor home (sweet!) Saturday morning. Work continued through that evening, leaving us with dry wall, filling and painting, and flooring to do. The clubhouse will definitely be open for business by OBS.

Thursday evening started out clear but it quickly clouded up, so observing was down for the count. I poked my head out about 2:00 am and wasn't prepared for what I saw. The clouds had formed in rows like a gigantic field of corn laid out north to south. Between the rows it was clear and full of stars. The lights of Orlando cast a strange but enchanting color to everything. For some reason air traffic was much busier than normal, with anti-collision lights strobing their warnings all over the sky. The only sound was our resident barred owl somewhere in the forest hooting his way to owl bliss. I just stood in the open and stared at this serene and beautiful setting. It was, in a way, magical.

Friday was cloudy all day, and did not improve toward evening. We learned that a fast-moving front was bringing severe weather, including a few tornadoes (Yikes!). The line of storms moved so fast that by the time we understood the severity of it, it was already past us. Then we got a steady rain for a few hours. Don't know when the rain stopped, because I was snug in my bed modulating my pillow.

Saturday was a bit better for astronomy. Mike Partain and his entourage joined us for an evening of enjoying the clear spots, which tended to be large and numerous. This required some flexibility on our part, but plenty of viewing was available. Mark Anderson, Carl Brown and Doug Sliman also joined us to enjoy the moving holes, or more accurately, what was revealed by the holes in the overcast. I tuned in to Albireo and was rewarded with the most intense colors that double star has yet gifted me.

The next new moon weekend will be better, so mark your calendars for December 7<sup>th</sup> - 9<sup>th</sup>. As usual, you have my personal guarantee for clear skies

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### NASA News

STEVE ROBBINS

NASA's deep space explorer, Dawn, surveyor of giant asteroids Ceres and Vesta, failed to report into NASA's Deep Space Network on October 31 and November 1. No, Dawn didn't run out of xenon, the propellant for its revolutionary ion motor, but instead, ran out of the much more prosaic hydrazine monopropellant for its maneuvering thrusters. [What an unqualified success](#) this 11 yearlong mission has been!

We lost another amazing spacecraft as well, Kepler, the exoplanet sleuth. But it did much more in addition to identifying 2,662 confirmed planets. Kepler also observed 530,506 stars, tabulated 61 supernovae, spawned 2,946 scientific papers published.

[Both spacecraft's demise](#) can be traced to a single hidden cause, the defective reaction wheels that have plagued US probes for decades. That made reliance on the hydrazine thrusters necessary and greatly increased hydrazine expenditure. NASA says the reaction wheel problems are solved. Stay tuned for results.

**SPAC Business Meeting** 

Our next business meeting is Wednesday, December 5<sup>th</sup>, at 8:00 PM at SPC Gibbs Campus, Natural Science Building, Room 139. 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.

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Click on the name to send email

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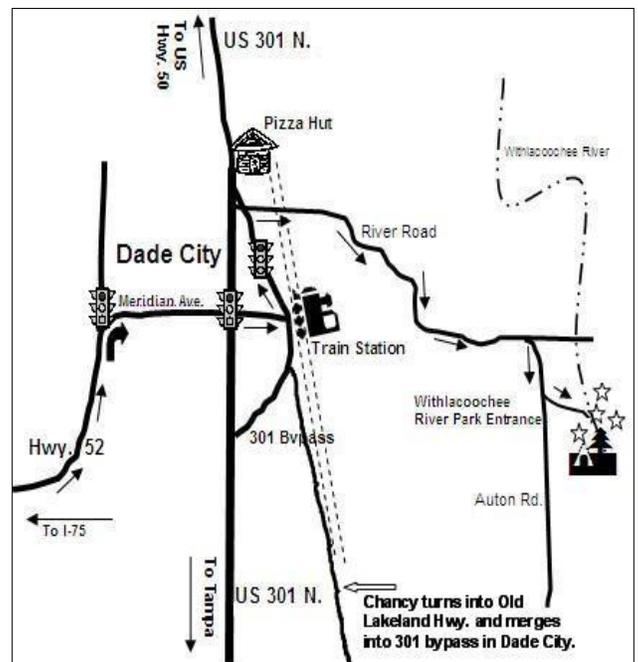
**Withlacoochee New Moon Weekends**

There's no need for reservations. However, the park closes at sundown, so you will

need to arrive before then. The park rangers will give you the gate-code once you're inside the park. Please do not call for the gate code as they are not allowed to give it out over the phone.

Reservations are not necessary. Please print and display our [Friends-Of-The-Park Pass](#) on your dashboard.

Please join us! All astronomy enthusiasts are welcome. You do not need to be a club member to attend. Please refer to our [Club Calendar](#) for details and scheduled dates.



**Withlacoochee River Park - Dade City, FL**  
 Detailed directions can be found at:  
[www.StPeteAstronomyClub.org](http://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 (*Under 18*): \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ St. \_\_\_\_ Zip: \_\_\_\_\_

E-Mail address: \_\_\_\_\_

- Single: [ ] \$ 30.00/YR. Includes one adult, minor children, the "SPACE" newsletter, and all the rights and privileges of membership.
- Family: [ ] \$ 35.00/YR. Includes two adults, minor children and the above rights and privileges.
- Student: [ ] Free. Expected date of graduation: \_\_\_\_\_
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