

# SPACE

The St. Petersburg Astronomy Club Examiner

August 2016

Editor - Jack Fritz

The St. Petersburg Astronomy Club, has been the center of family astronomy in the Tampa Bay Area for decades. Its 297 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

★ If you are like me, and I think you are, you are looking forward to an end to this tropical weather. Observing has been a bear this summer with all the rain and clouds. Things are about to turn around with the change in seasons.



It is now back to school season, and that means kids will be writing essays on what they did last summer. Naturally, you are all wondering what I did on my summer vacation (OK probably not). I just spent a few days at the Kennedy Space Center. Wow! What a place! Those of us who love science, history, and the American spirit can find all of those just a few hours away in one place. Honestly, I found the experience overwhelming at times. The Atlantis Space Shuttle is on display. They build up the tour with inspirational videos that brought a tear to my eyes as the majestic shuttle was unveiled.

There is also another powerful exhibit that should not be missed. The astronaut memorial sits behind the Atlantis exhibit. The courage of these astronauts cannot be

trivialized. They sacrificed everything to expand the reach of humanity beyond Earth. It's worth some of your time to remember them.

When you go, there are a few things you should know. You can't see it all in one day. The annual pass is only \$4 more than a two-day pass, and they give you a \$10 parking pass. The extended bus tour is worth an extra \$29 if you have two days. Otherwise, take the free bus tour. The KSC has the world's worst french fries, but the Florida Fresh Grill in Cocoa Beach has an amazing swordfish.

It's about time to go back to work. Our busy season is gearing up. We have some great speakers coming soon to tell us about exoplanets. The long range planning meeting is coming up on September 10<sup>th</sup>. New Moon Weekends are about to get dry and clear. The public outreach events will become more frequent. Things are looking good for our club. Come out and be a part. Keep looking up

## New Members

We would like to welcome Charles Lieving & Sarah Williams to our family of members.

## General Meeting

This month's meeting will take place on Friday, August 26<sup>th</sup> at 8:00 PM, at the Science Center of Pinellas County, 7701 22<sup>nd</sup> Ave. N,

St. Petersburg, FL.

Main Program - *Exoplanets*, by Dr. Simon Schuler, University of Tampa

### Upcoming Programs

**September** - *General Relativity, Gravity, and Gravitational Waves*, by Dr. Kevin MacKay, University of South Florida.

**October** - Annual Meeting, Election of Officers, Fall Picnic, and Sidewalk Astronomy. Please remember that our Annual Meeting begins at 7:00 PM, one hour earlier than normal.

### 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.

### Member Appreciation

KYLE BRINKMAN

★ There is only one candidate this month, Mr. Michael Davis. Mike really saved my bacon last month by presenting a fantastic program on Novae with only a week's notice. All of us who were there to enjoy it could appreciate the extensive knowledge presented by Mike's studies.

Mike is a contributor in many ways to our club. He's a regular at our mirror lab and a participant in many of our public outreach events. As a respected member of our board, his word carries weight in the decisions we make.

Mike, thank you for all that you do.

### From the Editor

JACK FRITZ

★ First of all, I would like to thank Mike Davis for his excellent presentation of Novae at last month's general meeting. Somehow

Mike can take a very complex topic and present it in a way we all can understand. Mike also serves as a Director-at-Large, and a mirror-grinding coach most every Saturday at the Mirror Lab.

Speaking of service, it's that time again. Time to think about who will lead our club in the coming year. Allen Maroney, Director-at-Large, will chair our Nominating Committee. He is looking for at least two other members to serve on the committee. Isn't it time you consider serving in a leadership position? Please call Allen at 727 867-4781 or email him at [amaroney@knology.net](mailto:amaroney@knology.net) if you are willing to serve on the committee or wish to be considered for a leadership position.

### Examiner Subscriptions

JACK FRITZ

★ We have had a substantial increase in the cost of printing and mailing the monthly newsletter. It now cost us about \$2 per newsletter. It is only fair that this cost is covered by the members electing to receive the newsletter via US Mail. Therefore, beginning in January, membership renewals will include a \$25 subscription fee for those members.

### September Astronomical Events

STEVE ROBBINS

★ Thursday, September 1 an annular Solar Eclipse will be visible in Madagascar, parts of the Indian and Atlantic Oceans and Central America.

Friday the 2<sup>nd</sup>, Neptune is at opposition.

Saturday, the 3<sup>rd</sup>, find Venus 1.2° S of the Moon.

Monday the 12<sup>th</sup>, Mercury is at inferior conjunction, eclipsed by the Sun.

Friday the 16<sup>th</sup> we will NOT be treated to a penumbral lunar eclipse centered on India.

Wednesday the 21<sup>st</sup>, Aldebaran will be .2° S of the Moon.

Wednesday the 28<sup>th</sup> Mercury will be at greatest Western elongation, 17.9° from the Sun.

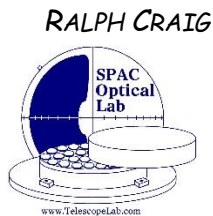
September's full moon is the Full Harvest Moon for this year, as October's full Moon is farther from the September 22 autumnal equinox.

**The Moon**

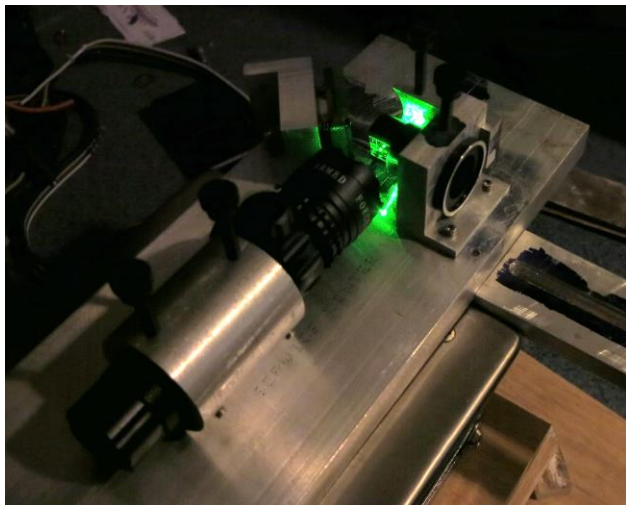
- New Moon - September 1, 05:03
- First Quarter - September 9, 07:48
- Full Moon - September 16, 15:05
- Third Quarter - September 23, 05:56
- New Moon - September 30, 20:11

**Mirror Lab**

★ Our grinder Devon and his Dad Dario have headed to the Stellafane Convention in Vermont which is being held from August 4<sup>th</sup>-7<sup>th</sup> this year. We're looking forward to seeing some photos of the event when they get back.



Ron and Paul have been working on the Bath interferometer for testing our mirrors.



Bath Interferometer

Mike has still been experimenting with re-melting thick Pyrex blanks into thinner larger diameter blanks in his kiln. More pictures on

the mirror lab web page at <http://www.telescopelab.com/>, and on Mike Davis's web page at <http://www.mdpub.com/>, and also on Allen Maroney's web page <http://www.knology.net/amaroney/>. The Stellafane Convention web page is <https://stellafane.org/convention/2016/>.

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.

**Outreach**

JIM HUNTER

★ Has anyone else noticed the clouds? After four nights, I finally got an OK night for sidewalk astronomy. I had about 20 folks stop by, but some were rookies, which is always good.

The outlook for viewing is very poor for the next couple months. School starts very early this year, but the change to standard time isn't until November 6<sup>th</sup>, so star parties may be slow until 2017.

I have the following scheduled:

- Saturday, November 19<sup>th</sup>, Little Manatee River State Park, near Sun City - for you Brandon/Riverview members. This is a first-time event
- Wednesday, December 7<sup>th</sup>, Stewart Middle School - near the river in Tampa. This is our fourth year.

We had a get together for the Outreach Crew at my home on Saturday, August 6<sup>th</sup>. Everyone who had helped last year was there except Dave Pearson. Can you imagine a



weaker excuse than "being with my daughter for our first grandson's birth." Talk about a lack of dedication to Outreach, or is it our cooking? Congratulations to Tara and Dave.



Our Outreach Crew

I thanked every one of the Crew. We figured our Crew presents astronomy to more people than any other SPAC activity except a Science Fair.

Since Penny has a musical harp, we found that not only does Kelly Anderson play one but has built them. I am impressed.

### New Moon at Withlacoochee

KELLY ANDERSON

★ Between the hot weather, and vacations, this month's New Moor Weekend was a complete bust. No one showed up.

### NASA News

STEVE ROBBINS

On its approach to Ceres, Dawn discovered the enigmatic Occator Crater, a fairly young crater with bright white stuff in the crater, especially at its center. Richard Hoagland flexed new alien theories. But now, we appear to have some answers. The material that shows white on photos turns out to be sodium carbonate, the same salt found around hydrothermal vents on Earth. Since this ma-

terial came from inside Ceres, not from a meteor impact, it implies that the inside of Ceres is hotter than predicted. It also may show the presence of water beneath Ceres' crust.

Sitting in its elliptical introductory orbit of Jupiter, Juno is now readying the October 19 maneuvering burn that will put them in their final 14-day science orbit so close to the cloud tops of Jupiter that the spacecraft is only expected to live for 37 orbits. In spite of the most extensive electronic shielding ever, a 400-pound titanium vault, the craft may not even last that long. Radiation exposure equivalent to [100 million dental x-rays](#) is what they expect. You have to wonder what they don't expect.

### International Observe the Moon

This year's event will take place on October 6<sup>th</sup>. The Moon will be in the first quarter. We are planning a public viewing at the Science Center. Please bring your telescopes and enjoy an evening of star gazing with us.

### St. Petersburg Science Festival

JOHN O'NEILL

The 2016 Science Festival is being held at the USF St. Petersburg Campus along the Bayboro Waterfront (4th street south) on the 22<sup>nd</sup> of October (Saturday) this year. Times are 10 AM to 4 PM. There are over 3,000 parents and children that attend this free event. If you would like to bring your scope and if I can get Kyle to cough up the \$50 for the booth, let me know. It is a really fun event with over one hundred cool exhibits. It would be a shame for us not to be in attendance. I have to work the WEDU-TV booth this year, so I am asking for some help. Email me at [john@oneilladvertising.com](mailto:john@oneilladvertising.com) if you would like to help. Note: You get a free parking pass and help with transporting your gear.

**SPAC Business Meeting** 

The Business Meetings are normally held on the second Wednesday of each month. Our next meeting is Wednesday, September 14<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:       | <a href="#">Kyle Brinkman</a>  | 727 455-6931 |
| Vice Pres.:      | <a href="#">Jack Fritz</a>     | 813 508-5680 |
| Secretary:       | <a href="#">Paul McNabb</a>    | 727 345-5713 |
| Treasurer:       | <a href="#">Jim Hunter</a>     | 813 909-7013 |
| Dir.-at-Large:   | <a href="#">Mike Davis</a>     | 727 474-6785 |
| Dir.-at-Large:   | <a href="#">David Pearson</a>  | 727 791-4241 |
| Dir.-at-Large:   | <a href="#">Allen Maroney</a>  | 727 867-4781 |
| SPACE Editor     | <a href="#">Jack Fritz</a>     | 813 508-5680 |
| Public Relations | <a href="#">John O'Neill</a>   | 727 637-5945 |
| Membership Chair | <a href="#">Shirley Vuille</a> | 727 864-2624 |
| Outreach Chair:  | <a href="#">Jim Hunter</a>     | 813 909-7013 |
| Librarian:       | <a href="#">Ralph Craig</a>    | 727 384-2086 |
| Club Webmaster:  | <a href="#">Chris Curran</a>   | 813 653-2604 |

Click on the name to send email

**Recognition of Patrons & Benefactors:**

|                          |            |
|--------------------------|------------|
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| David & Mina Swan        | Benefactor |
| Jack & Roni Fritz        | Benefactor |
| Antonio & Cherish Paris  | Benefactor |
| Tommy & Amy Ming         | Benefactor |
| Alexie & Yanira Velez    | Patron     |
| Anthony Staiano          | Patron     |
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| Thomas Tobin             | Patron     |

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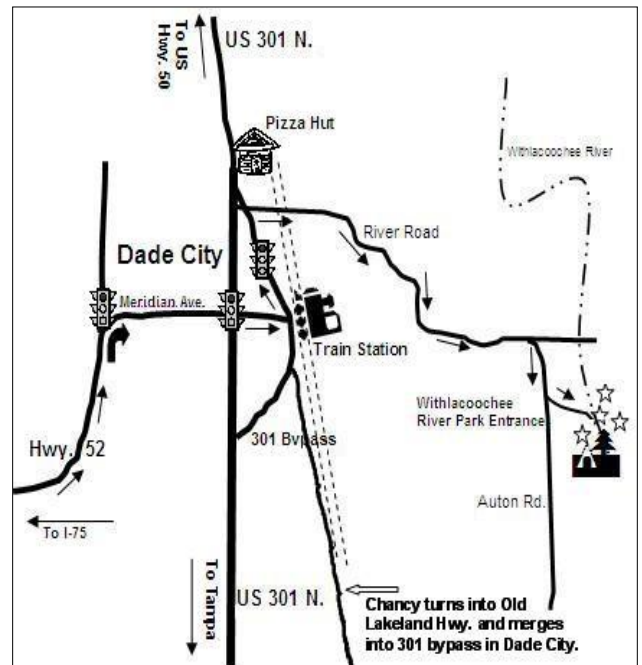
|                  |                                |              |
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| Editor           | <a href="#">Jack Fritz</a>     | 813 508-5680 |
| Assistant Editor | <a href="#">Nancy Huff</a>     | 813 621-3606 |
| Reporter         | <a href="#">Kelly Anderson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

**Withlacoochee New Moon Weekend**

Our next New Moon Weekend falls on September 2<sup>nd</sup> and 3<sup>rd</sup>.

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](mailto:starhopr3@msn.com) or 813 621-3606.



**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: \_\_\_\_\_ Newsletter Preference: Email [  ] US Mail [  ]

Single: [  ] \$ 20.00/YR. Includes one adult, minor children, the "SPACE" newsletter, and all the rights and privileges of membership.

Family: [  ] \$ 25.00/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: [  ] \$100.00/YR. A Benefactor member is entitled to the above rights and privileges.