



May 2015

Editor -Jack Fritz

The St. Petersburg Astronomy Club, has been the center of family astronomy in the Tampa Bay Area for decades. Its 257 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

★ Were you at the last two meetings? If not, you missed some good ones. Moving to the Science Center auditorium has let us do things we haven't done before. In March we logged in to the Kitt Peak Observatory in Arizona and operated a telescope over the internet. That was preceded by some expert advice on imaging, followed by an outstanding presentation on red dwarf stars. Last month, we had a professor speak to our group remotely via Skype. There were some glitches to straighten out. We all had a chuckle at the neon Budweiser sign behind Dr. Kelso, but the presentation worked out. I haven't heard a better explanation for how to observe the effects of dark matter. I'm glad we didn't impose too much on his night on the town. Now that we can bring in remote speakers there are many possibilities for bringing in experts.

This month our General Meeting will be our spring picnic. The meeting will start earlier, at 7PM. Please bring your scopes. I've been hearing from a number of newer astronomers that they could use a hand learning



their tools. This will be an excellent opportunity for that. Helping each other out is what our club is all about.

The long range planning meeting is later this month. It is an open meeting for all members who would like to talk about the direction of the club. The leadership of the club needs to hear what the membership likes and wants to be a part of. No reservations are needed.

This is an exciting year for space exploration. The first pictures from the New Horizon spacecraft are coming in from Pluto. This is a great time to be an astronomer.

### **New Members**

We would like to welcome Douglas Wallace to our family of members.

### **General Meeting**

This month's meeting will be our spring picnic and take place on Friday, May 22, 2015 at 7:00 PM, at the Science Center of Pinellas County, 7701 22<sup>nd</sup> Ave. N, St. Petersburg, FL.

Spring Picnic - We will begin one hour early, at 7:00 PM. Bring your telescopes and a covered dish.

### **Coming Programs**

June - Jim Hunter will give pointers on conducting a star party for schools and such. Ed Peachey the CEO of Career Source Pinellas

will update us on the future of the Science Center. Dr. Eduardo Fernandez, Eckerd College, will discuss Ion Engines.

### **Long Term Planning Meeting**

KYLE BRINKMAN

★ The club is going to take a little time to reflect on where we are as an organization and what we want our club to be. We will be meeting at Panera Bread, 1908 4<sup>th</sup> Street N. in St Petersburg one Saturday May 30<sup>th</sup> 1:00 - 3:00PM. Please mark your calendars and bring your thoughts and suggestions.

### **Member Appreciation of the Month**

KYLE BRINKMAN

★ I started this addition last month to express the club's appreciation for members who have been working tirelessly for the benefit of the club. This month's contributor is past president, John O'Neil. John is a talented and enthusiastic imager. His work has been published in Sky and Telescope. John did all the functions of a president, finding speakers, planning events, and representing our club during public outreach. What makes him special is his enthusiasm and helpfulness to members who are getting started in the hobby. He's always willing to help someone out with their telescope problems. Many of us even have his old scopes.

### **Editor's Note**

JACK FRITZ

★ Let me be the first to endorse this month's selection for Member of the Month. John served as Vice President from November 2011 until August 2012 when he took over as President. He served in that office through December 2014 and now serves as Public Relations Chairman. John works tirelessly toward improving our great club.

Jim Hunter, our Treasurer, is our Outreach Chair and he needs your help. It would

be great if we had outreach coordinators for both Hillsborough and Pinellas Counties. They could assist Jim by accepting requests for events, assigning event coordinators, posting the event on our Outreach Calendar and Facebook, and making sure that the event details are sent to our newsletter editor. Please let me know if you are willing to take on the task.

We also need additional volunteers to participate in our Outreach Program. It is a major contributor to the growth of our organization. Please consider joining in. We all find enjoyment in sharing the night sky with folks who have never looked through a telescope. Drop me an email if you would like to participate. Don't worry about not knowing how; you'll get the hang of it by participating in just one event.

### **Science Center of Pinellas**

JACK FRITZ

★ The Science Center is now owned by Career Source Pinellas and they need our help. Mr. Ed Peachey, CEO, has stated that he is glad to have us there and we have a home as long as they can maintain the facility.

They are looking for additional corporate sponsorship for their efforts. If you are part of a company that may be able to help, please make sure you attend our June meeting to learn more about their goals and objectives. Be sure to let us know if you have any ideas on fund raising.

### **June Astronomical Events**

JACK FRITZ

★ On June 6th, Venus reaches greatest eastern elongation of 45.4 degrees from the Sun. This is the best time to view Venus since it will be at its highest point above the horizon in the evening sky. Look for the bright planet in the western sky after sunset.

The summer solstice occurs at 22:38 EDT on June 21st. The North Pole of the earth will

be tilted toward the Sun, which will have reached its northernmost position in the sky and will be directly over the Tropic of Cancer at 23.44 degrees north latitude. This is the first day of summer (summer solstice) in the Northern Hemisphere and the first day of winter (winter solstice) in the Southern Hemisphere.

The planet Mercury reaches greatest western elongation of 22.5 degrees from the Sun on June 24<sup>th</sup>. This is the best time to view Mercury since it will be at its highest point above the horizon in the morning sky. Look for the planet low in the eastern sky just before sunrise.

This month's full Moon was known by early Native American tribes as the Full Strawberry Moon because it signaled the time of year to gather ripening fruit..

#### Lunar Phases

- Full Moon - June 2, 12:21 EDT
- Third Quarter - June 9, 11:43 EDT
- New Moon - June 16, 10:07 EDT
- First Quarter - June 24, 07:04 EDT

#### Outreach

JIM HUNTER

★ I did two solar system presentations at Athenian Academy in Dunedin on April 17<sup>th</sup>. They were very bright and questioning third graders, totaling about 40.



Steve Gaber delights a long line of future astronomers.

Steve Gaber, Kelly Anderson, Tom Spano, Wally Vazquez, Jack Fritz, and I set up at Booker Creek Preserve on April 25<sup>th</sup> for a crowd of more than 50. The sky was mostly cloudy but we could keep the Moon, Venus, and Jupiter in the scopes throughout the evening.



Jim Hunter centers the scope for the next on-looker.

We set up in one of the three parking areas with good views except to the north. It is a reasonably dark site but the Moon was fairly bright. We were greeted on the road in by a large turkey and two tortoises. There was a night walk through the Preserve which was a new experience for many, the nocturnal wildlife was out. When the crowd returned, they could clearly see the movement of Jupiter's moons. They were very appreciative of SPAC's participation and plan on having more events when it is cooler.



Kelly Anderson has a crowd at his scope also.

The last school event was held at Ben Hill Middle School in northwest Tampa on April 29<sup>th</sup>. It was set up by Chris Halls after I



failed for three years to contact the right person.

Chris Halls, Kelly Anderson, Jack Fritz, Wally Velasquez and I set up telescopes for the event. We gave a lot of viewers their first look at the Moon, Jupiter, Venus and Sirius through a telescope in spite of intermittent clouds. There were about 50 viewers.

I want to personally thank all who participated in the growing outreach program, including several in Pinellas who joined Shirley and Gregg.

On my list of contacts, I have Jack, Wally, Kelly, Tom Spano, Dave Pearson, Steve Gabor and Chris Curran serving the Hillsborough area and north Pinellas. My wife Penny pinch hit on short notice once as well. I can count on at least three to contribute their time and expertise. Using up to 30 viewers per scope, we typically only need three or four scopes.

Our aim is to supplement the 8<sup>th</sup> grade space program and maybe "hook" a student into wanting a scope. There are some parents who get interested and we have gotten a few new members. Libraries generally have more adults and Jimmie Keel Library sets up a display of astronomy books when there is an event. The classroom presentations have been well received by students as well as teachers.



Gulfport Sidewalk Astronomy

Greg Simpson set up at Gulfport. He writes: "I was in Gulfport on Friday, May 1 for

the first Friday Art Walk event. For most of the evening I had a high-power eyepiece trained on the very southern edge of the nearly-full Moon, where the last remnants of lunar dawn added shadows to the craters and mountains.



Greg Simpson proves that sidewalk astronomy flourishes even with city lights.

It was a beautifully clear, cool night, and I had a large number of folks come look through the telescope. After the crowds died down later in the evening, I turned the scope on Jupiter, up near the zenith. We could see three of the Galilean satellites, and one person could even just make out the Great Red Spot. I look forward to our next sidewalk astronomy viewing in Gulfport, on Sat., May 16<sup>th</sup>."

Thanks again for everyone's support of our Outreach Program.

### Coming Outreach Events

Please contact the event coordinator if you can help with these events:

- 9/19 International Observe the Moon Night - TBD

### Event Coordinators

- \*GS Greg Simpson 727 896-9410
- \*JH Jim Hunter 813 507-8415
- \*JO John O'Neill 727 637-5945

Please send a brief description of any events you are planning to Jim Hunter for inclusion in the newsletter.

### Mirror Lab

RALPH CRAIG

★ Our Canadian grinder, Peter, had his 8" f/8 mirror figured to within about 1/4 wave before he had to run back up north for the summer. Paul is now polishing his 10" f/6 Black Vitrified Ceramic mirror. Brent and Joey, and Mike Davis are in final figuring of their mirrors. We will see who finishes first.



Brett rechanneling his pitch lap.

Dimitri is assembling his 6" f/6 telescope for the mirror he has finished. 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: [www.telescope-lab.com](http://www.telescope-lab.com), and also on Mike Davis's web page at: [www.mdpub.com](http://www.mdpub.com).

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



John and Paul dismantling an SCT before cleaning.



Unusual Press to eliminate adding extra center correction on the mirror.

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

### NASA News

The Sahara Desert is one of the least hospitable climates on Earth. Its barren plateaus, rocky peaks, and shifting sands envelop the northern third of Africa, which sees very little rain, vegetation, and life.

Meanwhile, across the Atlantic Ocean thrives the world's largest rainforest. The



lush, vibrant Amazon basin, located in north-east South America, supports a vast network of unparalleled ecological diversity.

So, what do these seemingly different climates have in common? They are intimately connected by a 10,000 mile long intermittent atmospheric river of dust.

Every year, intense Saharan winds send enormous clouds of dust on a trans-Atlantic journey to the Amazon basin. This dust, much of it originating in an ancient lakebed in Chad, is rich in phosphorus. When it reaches the rainforest, the remains of long-dead organisms of the Sahara provide crucial nutrients to the rainforest's living flora. Phosphorus, which is essential to plant growth, is in short supply in the Amazon. Desert dust dumped into the forest every year helps to diminish this deficit.

NASA researchers are studying this dusty link between Amazon and Sahara, to understand how it operates and how it might be affected by climate change. Please visit [http://science.nasa.gov/science-news/science-at-nasa/2015/29apr\\_amazondust/](http://science.nasa.gov/science-news/science-at-nasa/2015/29apr_amazondust/) for more information.

The planet closest to the Sun is, ironically, one of the coldest. That's just one of many mind-bending discoveries about Mercury that NASA's MESSENGER spacecraft beamed back to Earth over the past 7 years. Earlier today, the mission ended with a crash as spectacular as some of its findings.

Mission controllers at the Johns Hopkins University Applied Physics Laboratory in Laurel, Maryland, have confirmed that MESSENGER slammed into the surface of Mercury on April 30th at 3:26 p.m. EDT. It had used the last of its propellant on April 24th and could no longer maintain a stable orbit. Traveling some 8,750 mph, the plummeting spacecraft made an unseen crater on the side of the planet facing away from Earth.

"Going out with a bang as it impacts the surface of Mercury, we are celebrating MESSENGER as more than a successful mission," says John Grunsfeld, associate administrator for the Science Mission Directorate at NASA Headquarters in Washington. "Now, we begin the next phase of this mission--analyzing the exciting data already in the archives, and unravelling the mysteries of Mercury."

Read more at: [http://science.nasa.gov/science-news/science-at-nasa/2015/30apr\\_messenger/](http://science.nasa.gov/science-news/science-at-nasa/2015/30apr_messenger/)

### **Withlacoochee New Moon Weekend**

JACK FRITZ

★ Unfortunately the weather did not cooperate so it turned into mostly a golf weekend.

### **For Sale**

Celestron Orange tube C8, 2000mm/f10 with Coated optics, and 8 X 50mm finder.

Meade LDX75 Equatorial Goto with AutoStar Controller, 8 D cell power supply, AC/DC power adapter and manual. Like new.

\$300.00 each or both for \$500.00. Please contact: Gus Nicoletta at 727 865-2938 or [k3gys@tampabay.rr.com](mailto:k3gys@tampabay.rr.com).

Mead LX200 8" f/10 SCT, Field tripod, AutoStar hand controller, AC adapter, 1.25" & 2" diagonal, JMI Moto-Focus, 8x50 finder scope, 40mm and 25mm eyepieces, flexible dew shield. All in very good condition, used very little. Everything in working order. Some rust on tripod legs and the front cover has a small dent.

Complete package. \$800.00. Please contact Bill Sefekar at 727-492-5444 or [sefiam@aol.com](mailto:sefiam@aol.com).

## **SPAC Business Meeting**

The Business Meetings are normally held on the second Wednesday of each month. Our next meeting is Wednesday, June 10<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:**

Clifford B. Benham	Benefactor
David & Mina Swan	Benefactor
Jack & Roni Fritz	Benefactor
Alexie & Yanira Velez	Patron
Gustav J. Waffan	Patron
Joe Ortiz-Bradley	Patron
John O'Neill	Patron
Matt Labadie	Patron
Robert Myers	Patron
Robert & Debora Csere	Patron
Thomas Tobin	Patron

## **Examiner Staff**

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

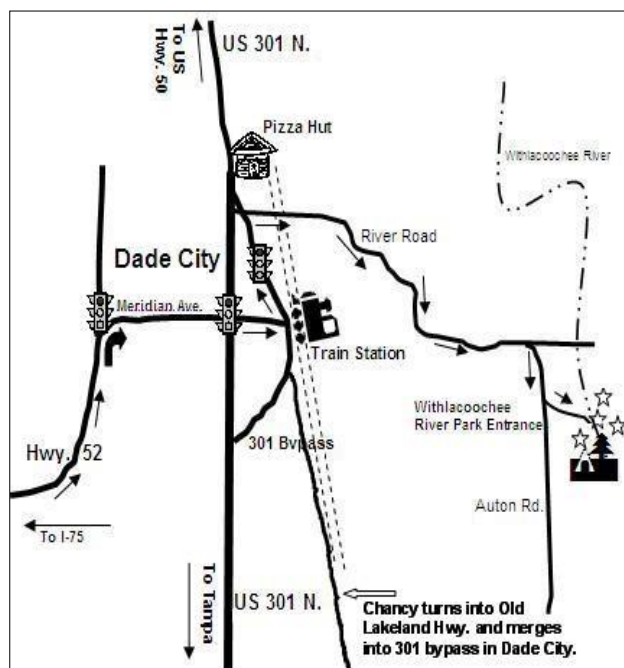
## **Withlacoochee New Moon Weekend (Cont.)**

Our next New Moon Weekend falls on June 12<sup>th</sup> and 13<sup>th</sup>. I hope to see you all there.

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.

#### **OPTIONAL DISCOUNTED MAGAZINE SUBSCRIPTIONS AS A BENEFIT OF MEMBERSHIP:**

Sky & Telescope Magazine: ☐ \$32.95/Yr.

Astronomy Magazine: ☐ \$34.00/Yr.