



# SPACE

St. Petersburg Astronomy Club **Examiner**

February 2024

Editor – Guy Earle

The St. Petersburg Astronomy Club has been the center of family astronomy in the Tampa Bay Area since 1927. Our 412 adult members are dedicated to promoting and sharing the wonders and science of astronomy. We host a dark-sky star party each New Moon at Withlacoochee River Park, along with local star parties, telescope-making workshops, science lectures, astronomy lectures, educational outreach sessions and much more.

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## March Preview

In next month's *Examiner*, our intrepid Field Reporter, Kelly Anderson, will provide a recap of our 2024 OBS star party.

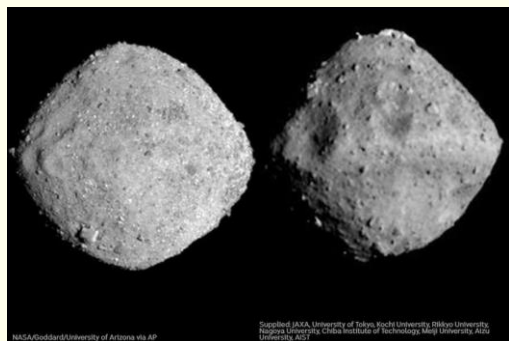
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Also, at our March General Meeting, Les Gatechair will give a presentation on "Remote Control Options for Imaging Telescopes."



## February General Meeting

This month's general meeting will take place on Thursday, Feb. 22<sup>nd</sup> at **7:30 PM**. The meeting will be *in person* at St. Petersburg College, Gibbs Campus, 6405 5<sup>th</sup> Avenue North, Natural Science Building, Classroom 236, 2nd floor, and **also virtual**. This month, SPAC member and asteroid and meteorite enthusiast **Greg Shanos**, will give a presentation, *OSIRIS-Rex and Hayabusa 2 Sample Return Missions to Asteroids Bennu and Ryugu*

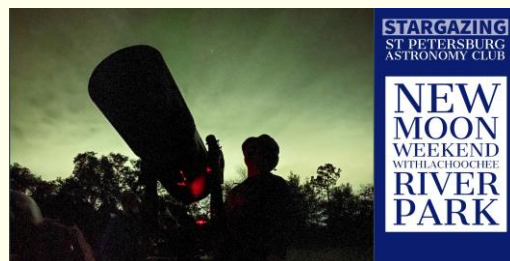


Join Zoom Meeting [HERE](#)

Meeting ID: 852 9687 2152

Passcode: 111992

The club's **New Moon observing weekend** will be by March 8<sup>th</sup>-9<sup>th</sup> at [Withlacoochee River Park](#) east of Dade City.



## New SPAC Members

We would like to welcome Mark Anderson, Ueangfa Buachum, Randall Weatherspoon, Sam Brandt, Beverly Frable & Lori Brill, Mandy & Francisco Campos, Mike Coate, Lou & Jan Merriweather Emmi Poole, and Drayton Browne to our family of members.

## Examiner Staff

Editor	<a href="#">Guy Earle</a>	813 785-1972
Space News	<a href="#">Steve Robbins</a>	386 736-9123
Field Reporter	<a href="#">Kelly Anderson</a>	813 672-2751
Mirror Lab	<a href="#">Ralph Craig</a>	727 384-2086

## President's Message

Happy Friday to everyone,



I must admit that I was convinced our current El Nino weather pattern was set to cloud up our 2024 OBS. While we did have clouds on some of the days, we did get in several nights of excellent viewing. This year's OBS had several firsts including a 30 minute hail storm on the first day of set up, an unexpected controlled burn (which clouded the skies Thursday) and capped off by a 2 hour helicopter search in the park for a missing person. Albeit, I feel we had a great OBS! We had a great turn out and the changes we made to OBS seem beneficial for our event. A big thank you is in order to A LOT of people who came out early to help with set up the electrical, the tents and parking signs. I want to also thank each and everyone of you for helping to break down then chairs and tables following our dinner on Saturday. This year was also unique in that I didn't have to scrounge for volunteers, everyone was eager to help. To me, this is a sign that we have a healthy club and are heading in the right direction.

Over the course of this year, Guy Earle and myself will be working on obtaining proposals for our North field expansion to include an equipment shed, power for scopes and additional RV 30 AMP hook ups. I would like to ask the club membership, if anyone is an electrical contractor or knows a reputable contractor, to please contact me as we will need an electrical contractor for the work needed. If we are able to economically afford the project, expanding into the North field will open up the best observing area in the park to everyone.

Lastly, we will have our general meeting next 7:30 PM, Thursday, February 22<sup>th</sup> at the St Petersburg College. Greg Shanos will present his talk on Osiris Rex \$ Hayabusa 2 Sample Return: Missions to Asteroids Benni and Ryugu.



*SPAC New Moon Weekend  
Withlacoochee River Park  
January 2024*

By Intrepid Field Reporter

We had two New Moon Weekends to start out the New Year with a dash of *eclat*<sup>1</sup>. The first New Moon Weekend of the year was originally scheduled for January 5-7, but the forecast for those dates were, technically speaking, yucky. So a group that became known informally as the “Sooner Cabal” decided to take advantage of a very good cloud forecast a week early. What could be better than looking for new astronomic marvels from our old, familiar dark site on the occasion of the New Year?



**Part One**

**December 30, 2023 – January 1, 2024**

Happy New Year to one and all!

Festivities began on Saturday, December the 30<sup>th</sup> with the arrival of Joe Canzoneri, Bob & Rita Mizell, Bob Stelmock, Mike Partain, Guy Earle, Jamie Kenas and Laura Lanier. Sadly, your Intrepid Field Reporter could not be among the happy group because of previous commitments.

Forecasts were right on target with clear skies and good seeing for the duration. While most of the group could only stay for Saturday night, the first three of the above list stayed Sunday to take advantage of the excellent seeing. The following three images, courtesy of Joe Canzoneri, were captured Saturday evening. They are: NGC 6334/7635/2244, the Claw/Bubble/Rosette nebulae, respectively.

Earlier than the scheduled New Moon, but pretty good seeing. Comfortable temperatures? Not so much.

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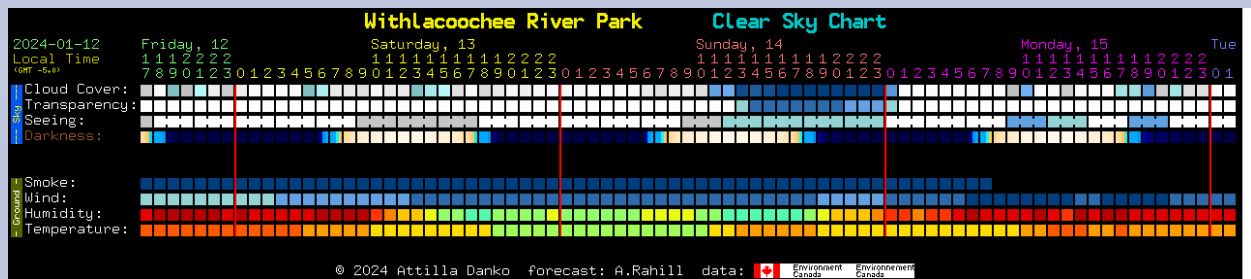
<sup>1</sup> Definition: *noun, a brilliant display or effect.*



## Part Two

January 11 – 13, 2024

So, how'd we do for the second New Moon weekend? Don't ask.



Not much to look at for the real New Moon Weekend. That is, unless you enjoy staring at the bottoms of clouds and dealing with winter storms, cloudy but warm on Friday followed by plummeting temperatures and another winter frontal passage with the usual suspects attached.

Oh well. Next month it'll be great.

Don't forget the 2024 edition of the Orange Blossom Special takes place February 7 – 11. Even though clear skies are guaranteed (Mike Partain, our newly elected President, says so), *we don't need no stinkin' stars* to have a good time at our annual star party. Between all the daily activities, events and presentations we'll probably be too tired to astronomize much anyway. At least those of a certain age might need a little more rest than average. Present Intrepid Field Reporter excepted, of course.

## *January General Meeting*

Even though time is short to put this issue together, I didn't want to leave this month without thanking NASA Astronaut Nicole Stott for joining us for a wonderful presentation at our January General Meeting. We had one of the largest crowds in years, and thanks to Brad Perryman for helping to arrange this presentation. Nicole talked about her experiences on three space shuttle missions and spending 104 days on the International Space Station. Her post NASA career has been dedicated to art and art education, which she talked about and answered many questions, and also shared wonderful photos of her experiences.



*GUY EARLE*









I also want to mention that Nicole Stott was very excited to find that within our SPAC family, the niece of members Dave Knowlton and his lovely wife is current NASA Astronaut Loral O'Hara, who is currently orbiting over our heads on the ISS. Nicole talked about her friendship with Loral and their love of painting.



*Editor's Note*

I had anticipated for the February edition to be a bit more voluminous, but on the Saturday of the OBS star party my laptop died and I was in a holding pattern until I could get it up and running again. That only happened on Thursday, yesterday, the day before the Examiner is due to go out. I have a few things to contribute myself as observations from OBS and using my new Seestar and first impressions.

I will say this much, the Seestar is awesome, and Bob Stelmock's presentation on Saturday truly cements my love of this telescope. Conversely, the wonderful presentation by Peter McLean also shows how much true DSO imagers are in a subset of this hobby, a speciality that, even if I applied those brain cells that I have at full capacity, would find themselves limited in their ability to understand how to navigate Pixinsight and produce those amazing images. Les Gatechair gave great presentations as well, which he is bringing to our March General Meeting.

As a quick note, I think things went really well for OBS this year, of which no small part was played by all the volunteers who stepped up and went out of their way to ensure that Mike and I had an easier time keeping things on track for everyone. Most especially, I want to thank Doug Sliman and his digital expertise for providing Wifi for the field and constructing the image voting; and to Les for taking charge and running the best imaging platform and recognition I think we've ever had.

Also, for SPAC's FOO friends (Far Out Observatory), I wish to thank them for coming out on Friday for our Swap Meet. It has been growing the past few years and it was truly an overflow of gear and great deals. I'm a big advocate for not caring one bit which club you belong to as long as you are a good person and love the night sky. There are times that members of all clubs get territorial on membership, and I am wholly against it. What can be gained by throwing up barriers to a hobby that we all love, with people who are consistently honest and fun, in a sky that progressively grows brighter? More can be gained by club cooperation than confrontation, so if you go to FOO or Chiefland, let us know and spread the word. There is only one night sky, after all.

Lastly, in the meantime, here are some images that I took at OBS both with my phone, my Nikon D5100 and DJI Mini3 Pro drone:

*GUY EARLE*










































## *March Lunar Calendar*

March 2024						
««	Sun	Mon	Tue	Wed	Thu	»»
					1 	2 
3 	4 	5 	6 	7 	8 	9 
10 	11 	12 	13 	14 	15 	16 
17 	18 	19 	20 	21 	22 	23 
24 	25 	26 	27 	28 	29 	30 
31 						

March 3, Antares will be  $0.4^\circ$  south of the Moon

### Third Quarter March 3

March 7, Mars will be  $3.5^\circ$  north of the Moon

### New Moon March 10

March 10, the Moon will be at Perigee: 356,895 km from Earth

March 11, the Moon will cross the celestial equator going northward at the Ascending Node

March 13, Jupiter will be  $3.6^\circ$  south of the Moon

March 14, the Pleiades will be  $0.4^\circ$  north of the Moon

### First Quarter March 16

March 19, Pollux will be  $1.5^\circ$  north of the Moon

March 19 is the Vernal Equinox, the beginning of fall for the northern hemisphere

March 21, Regulus will be  $3.6^{\circ}$  south of the Moon

March 23, the Moon will be at Apogee: 406,292 km from Earth

March 24, Mercury will be at greatest elongation from the Sun,  $18.7^{\circ}$  east

### **Full Moon, March 25, the Full Worm Moon**

March 25 will be a penumbral lunar eclipse beginning 00:53 and ending 05:32 EDT. This will be very subtle and difficult to detect

March 25, the Moon will cross the celestial equator going southward at the Descending Node

March 26, Spica will be  $1.4^{\circ}$  south of the Moon

March 30, Antares will be  $.3^{\circ}$  south of the Moon

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## *Space Exploration News*

So the Lunar Landing score, so far in this rush, is India 1, Japan 1, United States 0, Russia 0, as Japan's SLIM landed successfully on January 19, making Japan only the fifth country on Earth to successfully do so. Now the US is trying to go one for two on the launch yesterday of a totally privately funded lunar lander, Odysseus on February 15. If successful it will be the first privately funded lander on the Moon. It would also



mark the United States' first return to the Moon since 1972. Of course, it is aboard the lunar rocket du jour, Falcon 9 from SpaceX, as this will mark at least the 4th attempted lunar mission aboard that rocket. Odysseus is carrying six NASA investigatory payloads to the surface and an interesting project



from Embry Riddle University in Daytona Beach, EagleCam, which will be deployed before Odysseus lands with the aim of obtaining video of the Odysseus landing on the Moon.

Voyager 1 has been experiencing computer problems since December 12, 2023. Apparently one module, which collects data from the instruments onboard, has quit communicating properly with



the Flight Data System that sends reports back to Earth. This has resulted in the data being received in an incoherent jumbled “random” digital form that can’t be read. Then, in February, NASA concluded that the real problem there is likely a single bit of Flight Data System memory that has been flipped by interstellar radiation. Since it takes 45 days to send instructions to Voyager 1 and get a reply back, Voyager is more than 162 astronomical units from Earth. Therefore, tracing which bit is responsible is going to take some time: months or years. That alone makes this problem the most serious in the 45 year history of the spacecraft.

In January, the Parker Solar Probe executed its 18th perihelion passage, matching its own minimum distance of the Sun of 7.26 million kilometers, 4.51 million miles from the Sun. That’s only .048 astronomical units, less than 1/20 of Earth’s distance. The closer Parker Solar Probe gets to the Sun, the faster it needs to move, and in setting the record smallest distance, PSP also set the largest velocity ever attained by a spacecraft, 635,266 kilometers per hour or 394,736 miles per hour.

## For Sale

**Listing #1: Orion 10" Skyquest telescope, eyepieces, and accessories** for sale.

This telescope and accessories were brought by a lovely woman, Sherri Cope, at the Swap Meet on Friday at OBS. The equipment belonged to her late husband and she was seeking SPAC's help in selling them to a good home. I asked her to make a list of items which I would include along with some photos in the *Examiner*. There was not enough time for myself or Mike Partain to make a price list for her items, so I ask that if you are interested, please treat her fairly and give her an offer that would be comparable on Cloudy Nights or Astromart. She would prefer to sell everything together, but will possibly consider separating items. Please email her at:

[dzscope2@gmail.com](mailto:dzscope2@gmail.com) or call at (513) 476-4667

Here is a list of items:

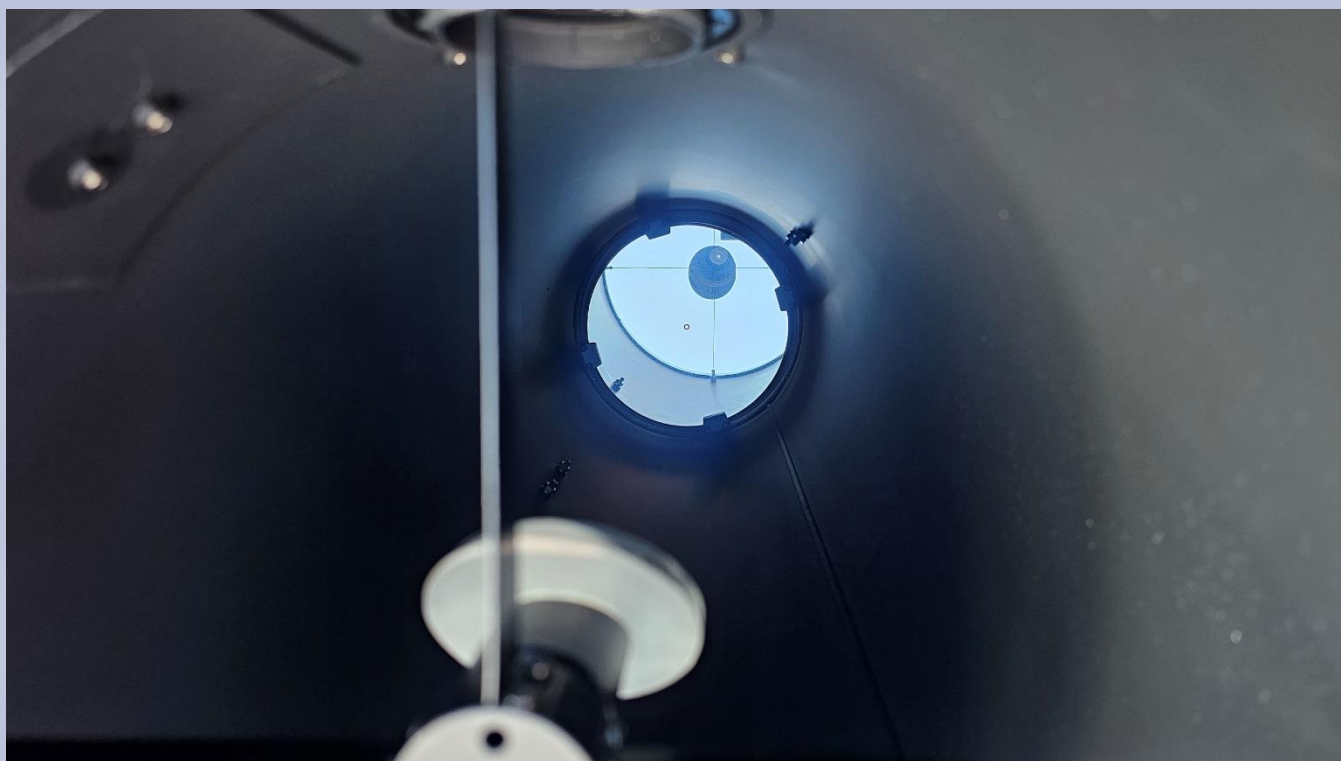
1. Orion Ultrascope 35mm Multi-coated
2. Orion LaserMate Deluxe
3. Orion Ultrascope 3.8mm Multi-coated
4. Orion Ultrascope 5.0mm Multi-coated
5. Orion Sirius Plossl 10mm Multi-coated
6. Orion Sirius Plossl 25mm Multi-coated
7. Orion 2.3mm Lanthanum Fully Multi-coated
8. Orion Superwide 65 degree Lanthanum Multi-coated 8mm -Long eye relief 20mm
9. Orion Superwide 65 degree Lanthanum Multi-coated 22mm -Long eye relief 20mm
10. Orion Superwide 65 degree Lanthanum Multi-coated 17mm -Long eye relief 20mm
11. Orion Superwide 65 degree Lanthanum Multi-coated 13mm -Long eye relief 20mm
12. Orion Optiluxe 40mm Fully Multi-coated
13. Orion Optiluxe 32mm Fully Multi-coated
14. Orion Object Locator
15. Orion Ultrascope 3-element Barlow Lens Fully Multi-coated
16. Orion 2x Barlow Lens
17. Orion 2" 4 piece set color lens filter (medium blue, green, deep yellow, red)
18. Orion 1.25" Skyglow Broadband filter



19. Orion camera (I believe thats what it is)
19. Orion 2" Moon Filter 13%T
20. Orion 1.25" Moon 13%T
21. Orion 1.25" 4 piece set color lens filter (yellow,red,blue, light green)
22. Orion 2" Ultrablock Narrowband filter
23. Orion 1.25" 4 piece set color lens filter (violet, yellow-green, orange, blue)
24. Orion 1.25" 4 piece set color lens filter (medium blue, green, deep yellow, red)









**Listing #2: Celestron Nexstar 6E with GPS, Skysync, Telrad star finder.** Not shown but included, Power tank, A/C adaptor, Celestron eyepiece kit, dew shield. Have the original box. Price 550...Separately, I have the Mark IV zoom lenses for sale, make offer. One leg brace cracked in cold weather years ago, but does not affect the performance. Telescoping leg does not slip.

I live in Parrish, FL and willing to set up for serious buyers at my home I share with wife and dog Molly. I am two miles east of the Outlet Mall in Ellenton.





## SPAC Business Meeting

Our next business meeting is **Wed., Mar. 13<sup>th</sup>, at 8:00 PM** via conference call; details upon request.  
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="#">Mike Partain</a>	850-339-0828
Vice Pres.	<a href="#">Guy Earle</a>	813-785-1972
Secretary	<a href="#">Shirley Vuille</a>	727 864-2624
Treasurer	<a href="#">Jim Hunter</a>	813 507-8415
Dir.-at-Large	<a href="#">Kyle Brinkman</a>	727 455-6931
Dir.-at-Large	<a href="#">Steven Gaber</a>	727 215-0464
Dir.-at-Large	<a href="#">Jack Fritz</a>	727 692-9831
SPACE Editor	<a href="#">Guy Earle</a>	813 785-1972
Public Relations	<a href="#">John O'Neill</a>	727 637-5945
Membership Chair	<a href="#">Shirley Vuille</a>	727 864-2624
Mirror Lab Chair	<a href="#">Paul McNabb</a>	727-345-5713
Outreach Chair	<a href="#">Jim Hunter</a>	813 507-8415
Star Party Chair	<a href="#">Mike Partain</a>	850 339-0828
Librarian	<a href="#">Ralph Craig</a>	727 384-2086
Club Webmaster	<a href="#">Jack Fritz</a>	813 508-5680
Dark Sky Chair	<a href="#">Leeann Muszynski</a>	813-601-0986

*Click on the name to send email*

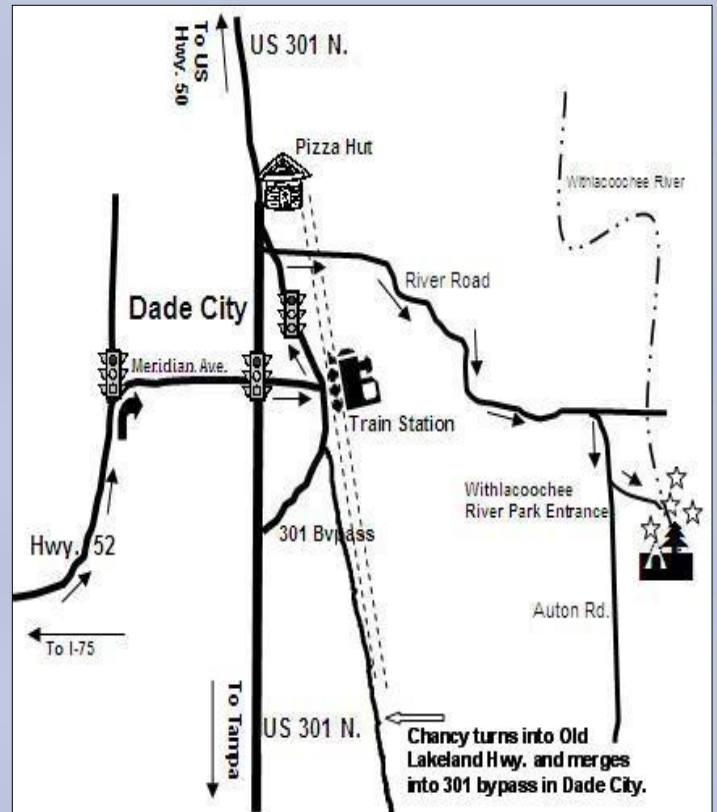
## Withlacoochee New Moon Weekends

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)



## St. Petersburg Astronomy Club

### Recognition of Patrons & Benefactors

Lakeisha & Stephen Black	Benefactor	Jan Anschuetz	Patron
David Brewer	Benefactor	Steven Balke	Patron
Walter Brinkman	Benefactor	Christopher Bankston	Patron
Dave & Deborah Catalano	Benefactor	Jason & Margie Bedell	Patron
Stephanie Colon &		Sean Bloch & Emiliy Kulokas	Patron
Ariel Grajales	Benefactor	Kyle Brinkman	Patron
Jack & Roni Fritz	Benefactor	Michael Callahan	Patron
Michael Haworth & Melanie Otte	Benefactor	Ralph & Christine Craig	Patron
Valerie Hyman	Benefactor	London & Leslie Crosby	Patron
Naseeb Nas Kaleel	Benefactor	Peter & Jaclynn Dimmit	Patron
Jamie Kenas	Benefactor	Guy & Kelly Earle	Patron
David Knowlton	Benefactor	Joseph & Pamela Faubion	Patron
Laura & Roy Lanier	Benefactor	Darla & Peter Flynn	Patron
Greg Legas	Benefactor	Steve & Cindy Fredlund	Patron
Brenda Lorenz	Benefactor	Steve Gaber & Karen Sell	Patron
Dave Lorenz	Benefactor	Richard & Mary Garner	Patron
Tod Markin	Benefactor	Steve Gross & Julia Winston	Patron
Kelly McGrew	Benefactor	Ben Groves & Veronica Bynum	Patron
Kevin & Karen Mulford	Benefactor	Timothy & Mary Ann Harris	Patron
Will & Jenni Nelson	Benefactor	Charlie & Linda Hoffman	Patron
David & Tara Pearson	Benefactor	Matt Hughes & Manuel Ordonez	Patron
Rath, Damon & Jean Futch	Benefactor	Bruce King	Patron
Vincent Risalvato &		Matt Labadie & Jennifer Willman	Patron
Tabitha Castillo	Benefactor	Bill Larsen	Patron
Christian & Wendy Rubach	Benefactor	Dave & Mary MacKenzie	Patron
Doug and Teri Sliman	Benefactor	Steve & Jeri Maiaroto	Patron
Jill & Robin Sumner	Benefactor	Allen Maroney & Tracee Elliott	Patron
Andrew & Bonnie Watts	Benefactor	Herb Monroe & Martha Stewart	Patron
*****		David & Kathryn Musser	Patron
Bill & Norma Amthor	Patron	Leeann Muszynski	Patron

Robert Nadeau & Ali Wuchert	Patron
Bill & Kim Northup	Patron
Dominick Oppolo	Patron
Stephen Oros	Patron
Michael & Carli Partain	Patron
Brad & Lisa Perryman	Patron
Alan Polansky	Patron
Thomas & Andy Prince	Patron
John & Abbie Redmond	Patron
Mike Rozycki	Patron
Gregory Satchwell	Patron
Manny Sosa & Leslie Long	Patron
Anthony Staiano	Patron
Jonathan Stewart	Patron
Tom & Michelle Sweet	Patron
Wally & Ramona Vazquez	Patron
Elizabeth Wood	Patron





## St. Petersburg Astronomy Club Membership Form

Membership in St. Petersburg Astronomy Club, Inc. (SPAC) is open to anyone, regardless of age, who is interested in astronomy. Benefits of membership include a monthly subscription to the SPAC Examiner newsletter, reduced camping rates and use of the club's bunkhouse at our dark sky site at Withlacoochee River Park, the ability to serve on the SPAC board and voting privileges. Dues are considered donations and are non-refundable. Membership options are available as listed below.

You are now able to choose how you wish to join or renew your membership:

- **Preferred On-line Website Option: New instructions as our website has been updated.**

Go to [https://www.stpeteastronomyclub.org/Sign\\_In.php](https://www.stpeteastronomyclub.org/Sign_In.php) on the SPAC website where you can join, view and update your membership profile, provide payment, and **print your membership card**.

- **US Mail Option: Takes more time to process manually because we are all volunteers.**

Complete the attached membership form and send it along with your payment to:

Jim Hunter  
17316 Oak Ledge Drive  
Lutz, FL 33549.  
(Checks should be made payable to SPAC, Inc.)

Adult 1: \_\_\_\_\_ Adult 2: \_\_\_\_\_

Street: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

Number of Children under 18: \_\_\_\_\_

### Memberships:

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.

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.

Student: ☐ FREE. SPAC offers free membership to full time high school and college students.

Expected date of graduation: \_\_\_\_\_

Total Submitted: \$ \_\_\_\_\_

**Your SPAC Membership Card is required for reduced fees at the campground.**