



Monthly Notices of the Everglades Astronomical Society



Naples, FL
April 2017

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President's Message

Jack Berninger gave a great presentation at our March meeting. It was fun and informative. Our next meeting will be a talk about variable stars. I, for one, know very little about these objects which inhabit our universe. Dr. Antonio Ordonez will be the presenter. I should add that not only was Antonio one of Bart's students, but he just recently received his doctorate on this subject. The new coordinator of the Fakahatchee Strand will be our speaker for the May meeting.

Just prior to last month's meeting, a directors' meeting was held. There were a couple of vacancies on our board that needed to be filled. The following people are your current Board of Directors (in no particular order): Ted Wolfe, Bill Fries, Jackie Richards, Mike Usher, Rick Piper, Bob Francis, Victor Farris, Eric Uthus, Bob Gurnitz, Todd Strackbein, Mary Ann Wallace, Charles Paul, and Denise Sabatini. Mike Usher is the new observing coordinator. I'd like to thank Charlie Paul for the great job he did for many years. Victor Farris is the new treasurer. I'd like to thank Bob Gurnitz for the great job he did for many years. In my humble opinion, this club is so great because of the talented and committed people who step up to the plate when they are needed.

At the last meeting, Charlie told us that our scheduled events were just about over. At that time, he was correct. HOWEVER, our club is being overwhelmed with requests for speakers and participation in various events. The upcoming eclipse is thankfully being covered in depth by the media. This makes our club highly visible and much in demand. My two current challenges are: 1. Keeping all the requests straight; 2. Getting people to cover them all. If you are interested in helping, please let me know **ASAP**. Taking advantage of this opportunity to promote our club is a gift.

Clear skies, Denise Sabatini

Dates for the "Fak"

Usually the best times to go out to the Fakahatchee Strand viewing site are moonless nights. Below is a list of upcoming Saturday nights that you will often find fellow club members out there enjoying the skies with you (weather permitting).

Date	Moonrise	Moonset
April 15	10:47 p.m.	9:07 a.m.
April 22	3:20 a.m.	3:09 p.m.

Sky Events

- April 3 - First Quarter
- April 7 - Jupiter at Opposition-closest approach to Earth
- April 10 - Full Moon
- April 19 - Last Quarter
- April 22/23 - Lyrid Meteor Shower (20 meteors per hour)
- April 26 - New Moon
- April Comets and Transits of Jupiter on page 3.

Next Meeting

April 11, 2017: Time 7:00 – 9:00 pm
Norris Center, Cambier Park

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EAS Member Ted Wolfe's photos from Chile continue to delight us. M8 (The Lagoon Nebula). To view Ted's article in the Naples News, Collier Citizen, click on the link on page 2. To view all of Ted's awesome photos on his website, go to: www.tedwolfe.com.



The Crab Nebula (M1) by EAS Member, Brian McGaffney, of The Nutwood Observatory. Brian's photo was featured in Astronomy Magazine's online Photo of the Day on 3/17/17. To view all of Brian's photos, visit his website at: <http://www.nutwood-observatory.com>



Jupiter by Chuck Pavlick (April 2016). Scope: Edge 9.25 w/2.5 Powermate; Camera: DMK 21 AU618 w/Orion color filters; stacked 450 frames per each color channel; processed with Registax and Photoshop.

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Published Articles by EAS Members

Ted Wolfe's article in the Naples News/Collier Citizen on March 21, 2017: Looking Up: The great pink cloud M8 is a star making machine.

<http://www.naplesnews.com/story/news/local/communities/collier-citizen/2017/03/21/looking-up-great-pink-cloud-m8-star-making-machine/99461498/>

TO VIEW THE ABOVE ARTICLE, PRESS "CTRL" AND LEFT CLICK BUTTON.

The below link provides previous articles in the Collier Citizen by Ted Wolfe that appeared over past years.

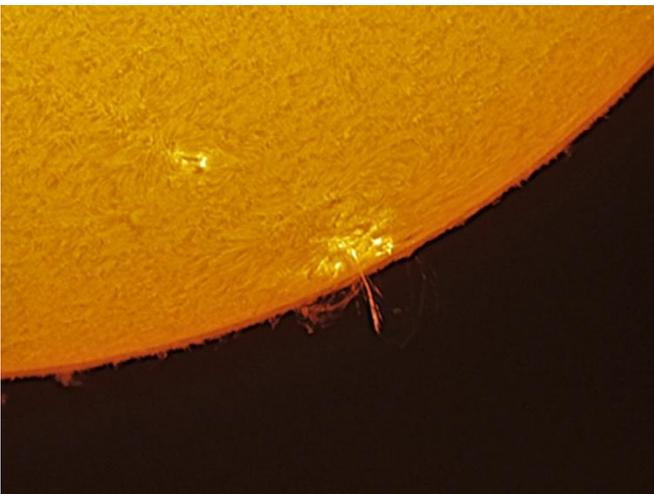
<http://search.naplesnews.com/jmg.aspx?k=looking+up+ted+wolfe>

To view all of Ted Wolfe's photos, visit his website @ www.tedwolfe.com .

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M63 (Sunflower Galaxy) by EAS Member, Chuck Pavlick, on 3/18/17. Camera: Starlight Xpress SX25C; Scope: Celestron Edge 9.25 w/0.62 reducer; 8 @ 480 seconds; captured in Nebulosity; processed in Pixinsight & Photoshop. To view all of Chuck's photos at his website, go to: <http://www.pbase.com/hobbynaut/astrophotos> .



The Sun by Chuck Pavlick on 4/3/17. To view all of Chuck's photos at his website, go to <http://www.pbase.com/hobbynaut/astrophotos> .

Interactive Site for best solar eclipse locations Contributed by Bart Thomas

http://xjubier.free.fr/en/site_pages/solar_eclipses/TSE_2017_GoogleMapFull.html?Lat=33.6647&Lng=-80.7789&Zoom=9&Map='ROADMAP'&OMap=0

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What It's Like on a TRAPPIST-1 Planet By Marcus Woo

With seven Earth-sized planets that could harbor liquid water on their rocky, solid surfaces, the TRAPPIST-1 planetary system might feel familiar. Yet the system, recently studied by NASA's Spitzer Space Telescope, is unmistakably alien: compact enough to fit inside Mercury's orbit, and surrounds an ultra-cool dwarf star—not much bigger than Jupiter and much cooler than the sun.

If you stood on one of these worlds, the sky overhead would look quite different from our own. Depending on which planet you're on, the star would appear several times bigger than the sun. You would feel its warmth, but because it shines stronger in the infrared, it would appear disproportionately dim.

"It would be a sort of an orangish-salmon color—basically close to the color of a low-wattage light bulb," says Robert Hurt, a visualization scientist for Caltech/IPAC, a NASA partner. Due to the lack of blue light from the star, the sky would be bathed in a pastel, orange hue.

But that's only if you're on the light side of the planet. Because the worlds are so close to their star, they're tidally locked so that the same side faces the star at all times, like how the Man on the Moon always watches Earth. If you're on the planet's dark side, you'd be enveloped in perpetual darkness—maybe a good thing if you're an avid stargazer.

If you're on some of the farther planets, though, the dark side might be too cold to survive. But on some of the inner planets, the dark side may be the only comfortable place, as the light side might be inhospitably hot.



This artist's concept allows us to imagine what it would be like to stand on the surface of the exoplanet TRAPPIST-1f, located in the TRAPPIST-1 system in the constellation Aquarius. Credit: NASA/JPL-Caltech/T. Pyle (IPAC)

On any of the middle planets, the light side would offer a dramatic view of the inner planets as crescents, appearing even bigger than the moon on closest approach. The planets only take a few days to orbit TRAPPIST-1, so from most planets, you can enjoy eclipses multiple times a week (they'd be more like transits, though, since they wouldn't cover the whole star).

Looking away from the star on the dark side, you would see the outer-most planets in their full illuminated glory. They would be so close—only a few times the Earth-moon distance—that you could see continents, clouds, and other surface features.

The constellations in the background would appear as if someone had bumped into them, jostling the stars—a perspective skewed by the 40-light-years between TRAPPIST-1 and Earth. Orion's belt is no longer aligned. One of his shoulders is lowered.

And, with the help of binoculars, you might even spot the sun as an inconspicuous yellow star: far, faint, but familiar.

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More Sky Events

- April 6 – Transit of Jupiter (Calisto)
- April 16 – Transit of Jupiter (Europa)
- April 18 – Transit of Jupiter (Io)
- April 21 – Transit of Jupiter (Ganymede)
- April – Comet 41P Tuttle-Giacobini-Kresak in Draco

Up-to-date comet info can be found at <http://www.in-the-sky.org>

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EAS 2017 DUES

For the bargain price of only \$20.00 per family, all this can be yours this year:

- Meet with your fellow astronomy enthusiasts at least 10 times a year;
- Learn about astronomy and telescopes. Check out our club scope;
- Many opportunities to view planets, nebulae and other celestial objects (even if you don't have your own telescope); and
- Enjoy the many astronomy programs at our regular monthly meetings.

Don't miss out! Fill out this form (please print clearly) and send it with your \$20 check to the

Everglades Astronomical Society, P. O. Box 1868,
Marco Island, Florida, 34146.

Name: _____

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