

The Focal Point

The Atlanta Astronomy Club
Established 1947
November 2016

Vol. 29 No. 6

Editor: Tom Faber

Table of Contents

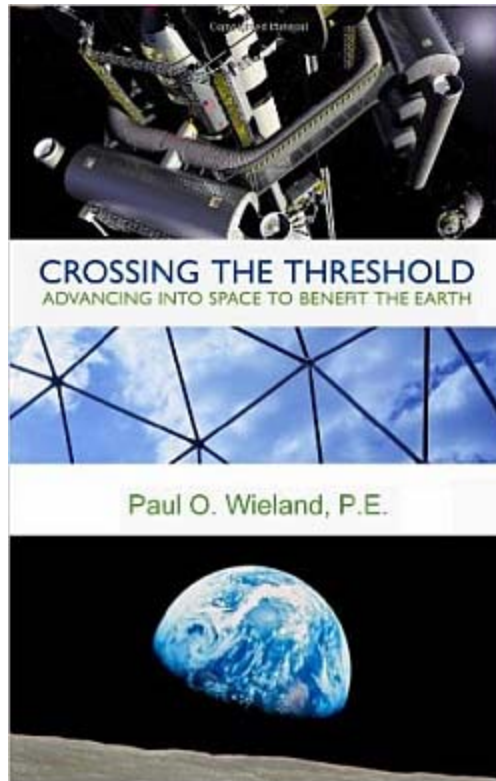
- Page 1...** November General Meeting, December Potluck
Page 2... Oct Meeting Report & Photos, President's Desk
Page 3... Next CE Meeting, Images by Chuck Painter
Page 4-7... The 2016 Peach State Star Gaze - Part 2
Page 7... AAC Online, Memberships, Contact Info, AL Info
Page 8... Calendar, AAC List Serv Info, Focal Point Deadline

November AAC General Meeting

Please join us for the next general meeting of the Atlanta Astronomy Club, to be held on Saturday, November 19th at 3PM at the Fernbank Science Center. A short beginner's program will be presented at 2PM. Our featured speaker will be Paul Wieland. Mr. Wieland will present a talk titled "Crossing the Threshold: Advancing into Space to Benefit the Earth".

Speaker Bio

Paul Wieland has been fascinated by the night sky since childhood, when the space race was in full swing and his older brother made a 6" reflector telescope (hand grinding the mirror) and took him along to find dark places to search for Messier objects or good views of the planets. Later Paul became an engineer and then worked for NASA from 1983 to 2005, on programs from the Hubble Space Telescope and the Spacelab 3 mission to the International Space Station for which he was primarily involved with developing the environmental control and life support system. After retiring from NASA he wrote a book, *Crossing the Threshold: Advancing into Space to Benefit the Earth*, that was awarded a gold medal in 2011 by the Independent Publisher Book Awards. He will speak about some of his experiences while working for NASA and what the future may hold for space development and possibilities for astronomy. More information is available on his Facebook page: [Crossing the Threshold](#) and website www.threshold2020.com



December Holiday Potluck Meeting

by Sharon Carruthers

HO! HO! HO! 'Tis the time once again to plan for our Holiday Potluck for our Dec 17th, 2016 General Meeting. We will be holding it at the AFS building in Smyrna, Setup at 6 PM, Dining at 7 PM and Observing afterwards (weather permitting). We will supply ham, turkey, soft drinks & coffee and ask you to bring the sides and/or desserts for 6-10 people. Family favorites and ethnic dishes are especially welcome. If you could drop me a line (Treasurer@AtlantaAstronomy.org) or a call at 770-941-4640 to tell me what you plan to bring, it would help prevent too many duplicate dishes. Also, if you have any folding tables & chairs that you can bring, it would really help us out. Suggested dishes to bring are:

APPETIZERS: Deviled Eggs, Chips & Dip, Pretzels, Cheese & Crackers, Veggie Tray.

SIDES: Pickles/Relish Tray, Buns & Rolls

VEGGIE SIDES: Mashed Potatoes, Stuffing, Sweet Potatoes, Pasta/Rice, Green Bean Casserole, Corn Pudding; Peas; Carrots, Tossed Salad, Jelled Salad, Coleslaw

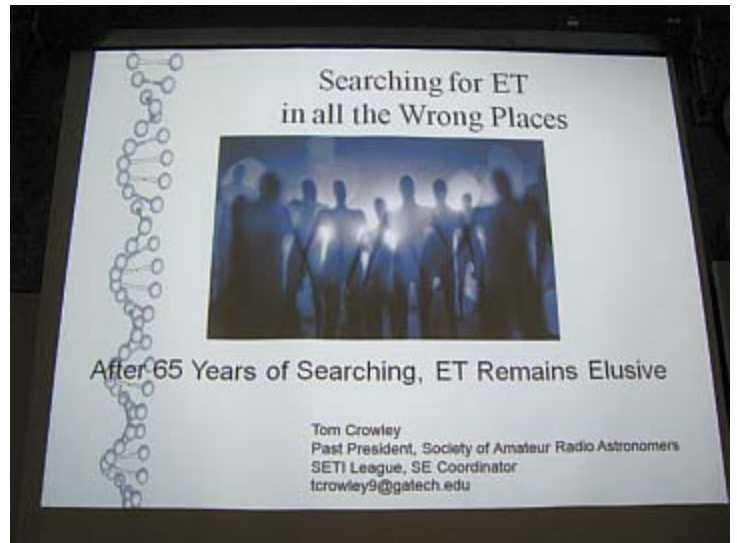
DESSERTS: Cookies, Squares, Cake, Pies, Puddings.

October AAC Meeting Report

Photos by Tom Faber unless noted

The October AAC general meeting was held on Saturday, October 15th at the Fernbank Science Center. About 40 members and guests were present. The general meeting began at 3PM. Our featured speaker was long time member of the Atlanta Astronomy Club and has been a long time member and past president of the Society of Amateur Radio Astronomers Tom Crowley. Tom presented a talk entitled "Searching for ET in all the Wrong Places." After 65 years of searches, signs of extraterrestrial intelligence (ET) still remain elusive. Tom described different techniques used in the search for ET and the various searches for ET that have been made over the decades. He talked about a couple of tantalizing signals seen once, such as the "Wow! Signal" detected in 1977 by Ohio State University's Big Ear radio telescope, but were never detected again. Tom then answered a number of questions about his talk.

After the Q&A session there were announcements by club officers about upcoming events and activities. After the meeting adjourned, some of the attendees went to Athens Pizza for dinner and more discussions about astronomy.



From the President's Desk

By Mark Banks, AAC President

It's that time of year again when all the schools are requesting our help with Astronomy related events and science projects. Please keep an eye on the club calendar and volunteer whenever possible. You don't need to be an expert. If you know some of the basic stuff, like the difference in a star and a planet, you know much more than most of the people you will be talking to. It's also a lot of fun and very rewarding to encourage the next generation of astronomers and science nerds. They will be very grateful for any help you can give them.

Help wanted: We need someone to take over as our Program Chair. As program chair you will schedule speakers for each monthly meeting and coordinate with them on their presentation. It's not a very difficult job. In the Atlanta area we have plenty of science professionals as well as Graduate students that are happy to talk to us. If interested please contact any club officer.

The Next Charlie Elliott Meeting

Meeting Details

A Beautiful day in the Solar Neighborhood - Join us November 19th, 2016 at 3:30 p.m. at the Charlie Elliott Conference Center, Conference Room B, for an engaging and enlightening discussion with Georgia State University's Dicy Saylor. Dicy earned a B.S. in astrophysics from the University of Georgia and an M.S. in applied physics from Northern Arizona University. Dicy is currently a fourth year PhD student at Georgia State University. She is working under the advisement of Dr. Sebastian Lepine, studying the solar neighborhood. She will be joining us to discuss her research on determining the rotation periods of nearby Sun-like stars. Stellar rotation periods are used to estimate the ages of stars using a method known as gyrochronology. Dicy will also discuss a test she hypothesized that can be used to test the strength of the gyrochronology method. For fun, Dicy likes to throw Volkswagens and run across the state of Georgia. Okay, I made the Volkswagens part up. But she really did run across the state of Georgia to raise money for a disabled veterans charity and she's a USAPL competitive powerlifter!

All of the Above!

Charlie Elliott Astronomy Observing Supervisor David Whalen will reprise his stand up comedy routine and might even talk about what you can expect to see in the sky this month with binoculars and small telescopes, as well as the monthly observing challenge.

Observing After the Meeting

All are invited to Jon Wood Astronomy Field immediately after the meeting (weather-permitting). The event is free and everyone is welcome.

Minutes & Handouts: The minutes, handouts, and presentations from past meetings of Charlie Elliott Astronomy are available for download on our Past Events web page, <http://ceastronomy.org/blog/events>. Monthly sky maps are available from skymaps.com.

Upcoming meeting dates are December 10 (potluck), January 28, February 25, March 25 (potluck), April 22, May 27, June 24 (potluck), July 22.

Images by Chuck Painter

Here are some images that club member Chuck Painter made at the 2016 Peach State Star Gaze.

The top image is of M17, also known as the Omega Nebula or Swan Nebula. This image has a total exposure time of 2 hours 5 minutes.

The second image shows M20, the Trifid Nebula. (Both M17 and M20 are in the constellation Sagittarius.) The M20 image has a total exposure time of 90 minutes.

The bottom image shows Caldwell 9, also known as the Cave Nebula. The Cave is a dim and diffuse bright nebula in the constellation of Cepheus. The total exposure time for this image is 2 hours 55 minutes.

For all pictures Chuck used the following equipment: Astrotek 8" Ritchie Chretien with Astrophysics CCDT67 focal reducer/field flattener and Orion Starshoot Pro V1 one shot color camera. Guiding was done with an Orion Starshoot Autoguider with an Orion ST80 guidescope and PHD2 guiding software. Mounted on an Atlas EQ-G mount controlled with EQMOD software and The Sky 6. Image acquisition with Maxim DL limited edition software. Image processed with Nebulosity and PixInsight.



The 2016 Peach State Star Gaze - Part 2

Photos by Tom Faber unless noted otherwise

The 23rd annual Peach State Star Gaze was held from Sunday, September 25th to Sunday, October 2nd. The weather was hot Sunday but the skies were pretty much clear Sunday night. Monday and Tuesday brought more hot weather and some showers. We watched a movie Monday night (*The Martian*) but by the time the movie was over the skies were pretty much clear again. Tuesday evening we had a double feature - *Forbidden Planet* followed by *The Dish*. The weather started cooling and dried out starting on Wednesday. By Friday and Saturday night the temperatures got down into the 40s.

Friday featured speakers presenting talks about imaging and Friday evening the AAC hosted a cake and ice cream social on the DAV pavilion. Saturday featured speaker was Dr. Michael Reynolds, Professor of Astronomy at Florida State College in Jacksonville, Florida. Dr. Reynolds presented a talk about the total solar eclipse occurring on August 21, 2017. He talked about where to go to observe the eclipse and how to safely observe and photograph it.

Saturday saw many attendees win door prizes at the drawing after the talks. And Micki and GC were back with Micki's Kitchen serving breakfasts, sandwiches, snacks, and dinners during the day and plenty of hot coffee, hot chocolate, and brownies at night to keep us observers awake!

Here are more images from the 2016 Peach State Star Gaze including some of the speakers, door prize winners, and other activities. We look forward to seeing everyone at the 2017 PSSG!



The ISS passing through the stars of Hercules Wednesday evening.





Dan Llewellyn presented a talk about beginning astrophotography.



The AAC hosted a cake & ice cream social Friday evening.

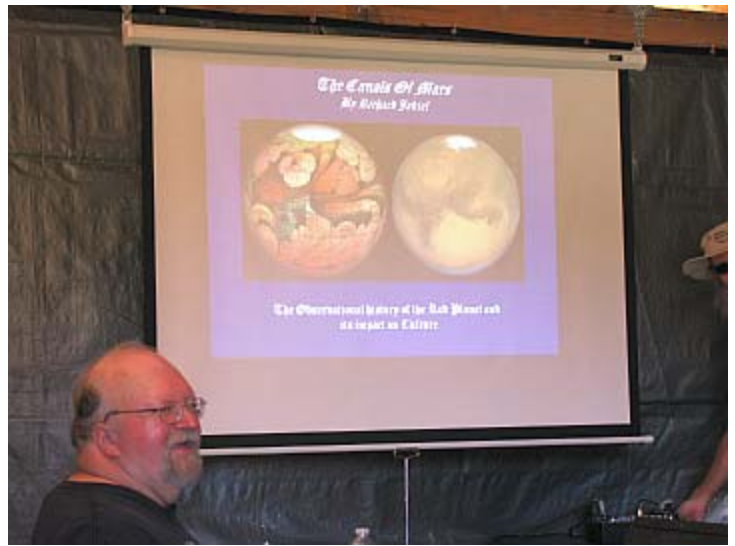


Van Macatee begins his Pixinsight Workshop on Friday.





Our keynote speaker, Dr. Michael Reynolds, presented a talk on Saturday about how and where to observe and photograph the August 21, 2017 solar eclipse. He gave us tips acquired over the course of traveling to observe many eclipses.



Richard Jackiel then presented a talk titled "The Canals of Mars" in which he talked about the history of observations of Mars.

Here are a few of the many door prize winners!



The winner of a Mini 50mm Guide Scope donated by Orion Telescopes



StarShoot Solar System Color Imager IV donated by Orion Telescopes



Continued on next page



Peter Macumber presents the grand prize winner her prize - an AR102 Refractor donated by Explore Scientific!

The **Atlanta Astronomy Club, Inc.**, one of the South's largest and oldest astronomical society, meets at **3:00 P.M.** on the 2nd Saturday of each month at the Fernbank Science Center in Decatur, or occasionally at other locations or times. Membership fees are **\$30** for a family or single person membership. College Students membership fee is **\$15**. These fees are for a one year membership.

Magazine subscriptions to *Sky & Telescope* or *Astronomy* can be purchased through the club for a reduced rate. The fees are **\$33** for *Sky & Telescope* and **\$34** for *Astronomy*. Renewal forms will be sent to you by the magazines. Send the renewal form along with your check to the Atlanta Astronomy Club treasurer.

The Club address: Atlanta Astronomy Club, Inc., P.O. Box 76155, Atlanta, GA 30358-1155. AAC Web Page: <http://www.AtlantaAstronomy.org>. Send suggestions, comments, or ideas about the website to webmaster@AtlantaAstronomy.org. Also send information on upcoming observing events, meetings, and other events to the webmaster.

Atlanta Astronomy Club Online

While this newsletter is the official information source for the Atlanta Astronomy Club, it is only up to date the day it is posted. So if you want more up to date information, go to our club's website. The website contains pictures, directions, membership applications, events, updates, and other information. <http://www.atlantaastronomy.org> You can also follow the AAC on Facebook by joining the AAC group, and on Twitter at <http://twitter.com/atlaastro>.

AAC Officers and Contacts

- President:** Mark Banks President@AtlantaAstronomy.org
- Program Chair:** Richard Jakiel Programs@AtlantaAstronomy.org
- Observing Chair:** Daniel Herron Observing@AtlantaAstronomy.org
- Corresponding Secretary:** Tom Faber
Focalpoint@AtlantaAstronomy.org
- Treasurer:** Sharon Carruthers Treasurer@AtlantaAstronomy.org
- Recording Secretary:** Alan Coffelt,
Secretary@AtlantaAstronomy.org
- Board Chair:** Sharon Carruthers Treasurer@AtlantaAstronomy.org
- Board:** Brigitte Fessele, Contact info TBA
- Board:** David Lumpkin, Contact info TBA
- Board:** Steve Phillips sandsphillips@att.net
- ALCor:** Ken Olsen, Contact info TBA
- Elliott Chapter Director:** Tim Geib director@ceastronomy.org
- Elliott Observing Supervisor:** David Whalen
observing@ceastronomy.org
- Elliott Recording Secretary:** Brian Tucker
secretary@ceastronomy.org
- Elliott Chapter ALCor:** Jack Fitzmier
- Elliott Coordinator:** Lacy Mitchell, Lacy.Mitchell@dnr.ga.gov
- Elliott Webmaster:** Larry Owens webmaster@CEastronomy.org
- Elliott Outreach Coordinator:** Dan Thoman
outreach@ceastronomy.org
- Georgia Astronomy in State Parks:** Sharon Carruthers
Treasurer@AtlantaAstronomy.org
- PSSG Chairman:** Peter Macumber pmacumber@nightsky.org
- PSSG Co-Chair:** Open
- Sidewalk Astronomy:** Brad Isley
sidewalkastronomy@AtlantaAstronomy.org
- Light Trespass:** Ken Edwards, Contact info TBA
- Woodruff Observ. Coordinator:** Sharon Carruthers
Treasurer@AtlantaAstronomy.org
- AAC Webmaster:** Daniel Herron
Observing@AtlantaAstronomy.org

Calendar by Tom Faber (Times EDT/EST unless noted)

AAC Events are listed in BOLD

- Nov 14th, Monday: Full Moon.
- Nov 17th, Thursday: Leonid Meteor Shower peaks.
- Nov 19th, Saturday: **AAC Meeting at Fernbank Science Center 3:00PM.**
- Nov 19th, Saturday: **CE Chapter Meeting 3:30PM.**
- Nov 21st, Monday: Moon Last Quarter.
- Nov 25th, Friday: Grouping of crescent moon, Jupiter, and Spica.
- Nov 29th, Tuesday: New Moon.
- Nov 30th, Wednesday: Moon near Mercury.
- Dec 3rd, Saturday: Moon near Venus.
- Dec 4th, Sunday: Moon near Mars.
- Dec 7th, Wednesday: Moon First Quarter.
- Dec 8th, Thursday: Earliest Sunset in Atlanta: ~5:27PM EST.
- Dec 10th, Saturday: **CE Chapter Meeting & Potluck 3:30PM.**
- Dec 10th, Saturday: Saturn in conjunction with the Sun. Mercury at greatest elongation east.
- Dec 12th, Monday: Moon occults Aldebaran: Disappears at 10:53PM, Reappears at 12:00AM.
- Dec 13th, Tuesday: Full Moon. Geminid Meteor Shower peaks.
- Dec 17th, Saturday: **AAC Holiday Potluck/Meeting at the AFS Building beginning at 6PM.**
- Dec 20th, Tuesday: Moon Last Quarter.
- Dec 21st, Wednesday: Winter Solstice at 5:44AM EST.
- Dec 28th, Wednesday: Mercury at inferior conjunction.
- Dec 29th, Thursday: New Moon.
- Jan 4th, Wednesday: Earth at Aphelion. Latest Sunrise in Atlanta: ~7:42 AM.

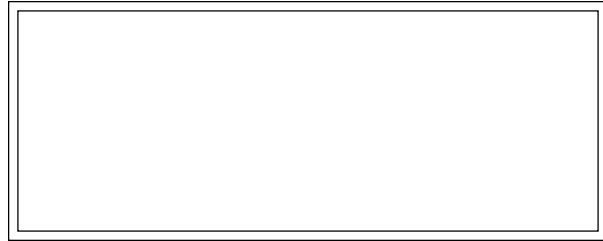
For more event listings see the calendar at www.atlantaastronomy.org

Atlanta Astronomy Club Listserv

Subscribe to the Atlanta Astronomy Club Mailing List: The name of the list is: AstroAtlanta. The address for messages is: [AstroAtlanta@yahoogroups.com](mailto: AstroAtlanta@yahoogroups.com) . To add a subscription, send a message to: [AstroAtlanta-subscribe@yahoogroups.com](mailto: AstroAtlanta-subscribe@yahoogroups.com) .

Focal Point Deadline and Submission Information

Please send articles, pictures, and drawings in electronic format on anything astronomy, space, or sky related to Tom Faber at focalpoint@atlantaastronomy.org. Please send images separate from articles, not embedded in them. Articles are preferred as plain text files but Word documents or PDF's are okay. You can submit articles anytime up to the deadline. **The deadline for December is Saturday, November 26. Submissions after the deadline will go in the following issue.**



FIRST CLASS



www.betagg.com



We're here to help! Here's how to reach us:

Newsletter of The Atlanta Astronomy Club, Inc.



FROM:

Tom Faber

506 Treeridge Parkway
Alpharetta, GA 30022

Atlanta Astronomy Club

P.O. Box 76155

Atlanta, GA 30358-1155

www.atlantaastronomy.org

On Twitter at <http://twitter.com/atlaastro>