



The Night Sky

The Newsletter of
The Astronomy Club of Akron
www.acaoh.org

Volume 40 Number 11

November 2018

Next Meeting: Friday - November 16, 2018 - 8:00 PM - New Franklin

ACA NEWS AND NOTES **NOVEMBER 2018**

ACA Meetings

Just a reminder, ACA does not hold a monthly meeting in December. Our next ACA membership meeting is scheduled for 8:00 p.m. on Friday, January 25th at New Franklin City Hall. Mark your calendars and plan to attend!

Members Social

Our next ACA Members Social is a gathering for Sunday Brunch at The Galaxy Restaurant on January 20, 2019. Mark your calendars now for this popular social event!

Meeting Refreshments

ACA still needs 2 volunteers to cover meeting refreshments for February 22nd and April 26th. Contact President Cathy Loboda via email if you would like to commit: cnloboda@aol.com

OFFICERS 2018 – 2020

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OTAA Representative

Lou Poda

October Treasurer's Report

By Nick Mihiylov

10/1/2018 Through 10/31/2018

Checking Beginning Balance	\$1,191.53
Income	
Memberships	420.00
Total Income	\$325.00
Expenses	
Check #1223 Club Picnic Expenses	-197.16
Check #1224 Speaker dinner Reimbursement	-52.85
Check #1225 Observatory R&M	-462.11
Total Expenses	-712.12
Income Less Expenses	-\$292.12
Checking Ending Balance	\$899.41
<hr/>	
Savings Beginning Balance	\$2,567.00
Earned Interest	0.04
Savings Ending Balance	\$2,567.04
<hr/>	
Petty Cash Beginning Balance	\$50.00
	0.00
Petty Cash Ending Balance	\$50.00
<hr/>	
Petty Cash	50.00
Savings	2,567.04
Checking	899.41
Grand Total	\$3,516.41

Article by Nick Mihiylov
ACA Treasurer.

SWAP & SHOP



FOR SALE:

Orion Sirius 40mm Plossl

Asking: \$25

Contact: Glenn Cameron

Phone: 330-737-1472

Email: glenn@cameronclan.org

FOR SALE:



Televue Radian 12 mm Eyepiece

- Excellent condition.

Asking: \$180 (cash)

Contact: Fred Fry

Email:

riverfry@gmail.com

FOR SALE:



Televue Radian 18 mm Eyepiece

- Excellent condition.

Asking: \$180 (cash)

Contact: Fred Fry

Email:

riverfry@gmail.com

FOR SALE:

Celestron CPC Deluxe 800 HD Telescope with tripod.

Accessories:

- Celestron 1.25" eyepiece and filter kit.
- Tele Vue nebula filter.
- Celestron UHC/LPR filter.
- Celestron 15mm 1.25" 82 degree wide field eyepiece.
- Stellarvue 1.25" Dielectric Diagonal.
- Stellarvue 1.25" erecting prism.
- Celestron power tank and dew shield.
- Astrozap sun filter.
- Celestron AC adaptor.
- JMI custom hard shell case for telescope.

All 8 months old, brand new condition.

Asking: \$2200

Contact: Jim Hall

Phone: 330-268-8695

FOR SALE:



Pentax XW 20mm Eyepiece

- Excellent condition.
- Small mark on 1.25" barrel.
- Always used in a compression clamp.

Asking: \$220 (cash)

Contact: Fred Fry

Email: riverfry@gmail.com

FOR SALE:

Celestron NexStar 8i computerized to go 8" F/10 Schmidt-Cassegrain

Focal length 2032 mm with 406x highest useful power.

Includes:

- GPS module.
- Five multicoated Plössl eyepieces.
- 2X Barlow lense.
- Seven filters.
- A/C adaptor.
- Night vision flash.
- Celestron star pointer.

All rarely used and in new condition.

Cost \$1,689 new.

Asking: Best Offer

Contact: Nick Bade

Email: nb@tribco.com

Phone: 216-486-2000 weekdays and

440-585-8687 evenings and weekends.

Advertise in the Swap n Shop!

Send a picture of
your **ASTRONOMY
RELATED** item and
relevant information
to the newsletter
editor:

speedymissy@yahoo.com

November 16, 2018 - General Membership Meeting

Speaker: Professor Stacy McGaugh Chair, Department of Astronomy Director, Warner & Swasey Observatory Case Western Reserve University <http://astroweb.case.edu/ssm/index.html>

Presentation: "Divining the Difference between the Dark and the Light." There is ample evidence for missing mass in our universe: dark matter whose gravity is felt but which goes unseen. Despite decades of searches for well-motivated particle dark matter candidates, laboratory searches have repeatedly come up empty: the missing mass is absent without leave. I will discuss the astronomical evidence that establishes the missing mass problem, and how some of it points to a different interpretation: that we may not understand gravitation as well as we would like to think.

Biography: Professor Stacy McGaugh is an astronomer who studies galaxies, dark matter, and theories of modified gravity. He is an expert on low surface brightness galaxies, a class of objects in which the stars are spread thin compared to bright galaxies like our own Milky Way. He demonstrated that these dim galaxies appear to be dark matter dominated, providing unique tests of theories of galaxy formation and modified gravity. McGaugh studied at MIT, Princeton, and the University of Michigan. He is a distinguished alumnus of both Flint (MI) Northern High School and the Astronomy department of the University of Michigan. McGaugh was a research fellow at the Institute of Astronomy at the University of Cambridge, the Department of Terrestrial Magnetism of the Carnegie Institution of Washington, and Rutgers before joining the faculty of the University of Maryland in 1998. In 2012, he moved to Case Western Reserve University where he is currently the Chair of the Department of Astronomy and Director of the Warner and Swasey Observatory.

Meeting Location:

**New Franklin City Hall
5611 Manchester Road
Akron, OH 44319**

Please note that we ALWAYS encourage the public to attend ANY of our events, including meetings. Come and enjoy the lecture and talk to us about astronomy!

November Astronomical Events

Day Hour(UT)

6 02 Venus 10° S. of Moon
6 15 Mercury greatest elong. E. (23°)
7 16 NEW MOON
9 06 Mercury 1° 8 N. of Antares
9 12 Mercury 7° S. of Moon
11 16 Saturn 1° 5 S. of Moon
12 18 Pluto 0° 9 S. of Moon Occn.
14 03 Venus stationary
14 16 Moon at apogee
15 15 FIRST QUARTER
16 04 Mars 1° 0 N. of Moon Occn.
17 05 Mercury stationary
17 06 Neptune 3° N. of Moon
17 22 Juno at opposition
20 20 Uranus 5° N. of Moon
23 06 FULL MOON
25 08 Neptune stationary
26 07 Jupiter in conjunction with Sun
26 12 Moon at perigee
27 09 Mercury in inferior conjunction
30 00 LAST QUARTER

*Information Credited,
Her Majesty's Nautical Almanac Office,
United Kingdom Hydrographic Office,
US Naval Observatory.*

December Astronomical Events

Day Hour(UT)

2 00 Venus greatest illuminated extent
3 19 Venus 4° S. of Moon
5 21 Mercury 1° 9 S. of Moon
6 20 Mercury stationary
7 07 NEW MOON
7 15 Mars 0° 04 N. of Neptune
9 05 Saturn 1° 1 S. of Moon Occn.
10 04 Pluto 0° 7 S. of Moon Occn.
12 12 Moon at apogee
14 14 Neptune 3° N. of Moon
14 23 Mars 4° N. of Moon
15 12 FIRST QUARTER
15 12 Mercury greatest elong. W. (21°)
18 04 Uranus 5° N. of Moon
20 02 Jupiter 5° N. of Antares
21 08 Mercury 6° N. of Antares
21 15 Mercury 0° 9 N. of Jupiter
21 22 Solstice
22 18 FULL MOON
24 10 Moon at perigee
27 15 Juno stationary
29 10 LAST QUARTER

ACA Meeting Minutes October 26, 2018

Meeting opened at 8 p.m. Ann Ferrell Asst./Sec./treasurer welcomed members and friends and thanked Susan and James Swift for bringing refreshments.

Program: "The Columbia Accident. What really happened?" Our presenter Dr. Matt Melis, NASA Aerospace Engineer, was truly one of our most engaging speakers and he captured our attention and enlightened an eager audience.

Matt is also very much committed to STEM programs in schools. He spent time in sharing with one of our youngest members, Marin, about NASA internships and contracted firms that work with NASA.

For those who were there, Dr. Melis brought to all special edition DVD's (videos that the general public never had access to) Space Shuttle posters, NASA stickers, and Shuttle book markers.

V.P. Justin Phillips led the meeting as our President Cathy Loboda was out of town: Paris, France. She will return for our November meeting. Thank you Justin for taking the reins.

The secretary's minutes and treasurer's report were accepted as published in the news and notes.

Susan Swift secured an old ACA brochure and suggested we give these to star party attendees. Do we need to print more?

This was a shortened business meeting at our speaker was given an additional 1/2 hour for a Q&A and we did have lots of questions.

The meeting adjourned at 10 p.m.

*Article By Ann Ferrell
ACA Asst.Secretary/Treasurer*

Parker Solar Probe

By Gregg Crenshaw

As I type this, November 4, 2018, the Parker Solar Probe, launched August 12 from Kennedy Space Center on a Delta IV-Heavy rocket, at about 10:28 p.m. EST. On Nov. 5, the probe will achieve its first perihelion - its first close approach to the Sun - and will come within 15 million miles of the Sun's surface. During perihelion, the spacecraft will reach a top speed of 213,200 miles per hour relative to the Sun.

This speed and distance will mark new records for both closest solar approach and top heliocentric speed by a spacecraft.

At perihelion, Parker Solar Probe will fly through material at about 3.6 million degrees Fahrenheit. The spacecraft will be protected from intense solar radiation by its Thermal Protection System, or heat shield. Parker Solar Probe employs a host of autonomous systems to keep the spacecraft safe without guidance from Earth — including automatic retraction of the solar panels to regulate their temperature, attitude control using solar limb sensors that ensures all of the instruments remain in the heat shield's shadow, and a sophisticated guidance and control system that keeps the spacecraft pointed correctly.

For several days around the Nov. 5 perihelion, Parker Solar Probe will be completely out of contact with Earth because of interference from the Sun's overwhelming radio emissions.

Following perihelion, the mission operations team at the Johns Hopkins Applied Physics Laboratory will await a beacon tone from the spacecraft, which will let them know the status of Parker Solar Probe.

For more information visit <http://parkersolarprobe.jhuapl.edu/>

*Article By Gregg Crenshaw
ACA Trustee*

Letter From The Editor

By Marissa Fanady

Hello everyone! As December draws near and the holidays kick into high gear we get ready to welcome a new year in the hopes of more wonderful astronomical observations, more outreach events to educate the public and draw in new members, and of course more members only events to share our love of astronomy and seal our bonds. Each and every one of these activities are such a splendid time to be had by all and you, our membership and board, are whom make these activities wonderful. Without you the club would not exist. So I extend my gratitude and thanks to all of you for your activity and support for the Astronomy Club Of Akron, you make all of this possible! I also extend my thank you to those who have supported this newsletter and submitted articles over this past year, you were a huge help and gave your club's newsletter a little extra spice. I hope to continue to see more submissions for next year's editions. Don't be shy, consider writing an article for your newsletter; no better way to hone your writing skills than to write! In observance of the holiday season there is no newsletter next month, so relax and enjoy your holiday season because I know I will. Have a safe and happy holiday and a very merry Christmas everyone, I hope to see you all in 2019 for many more observations and good times. As always, watch the skies!

*Article By Marissa Fanady
ACA Publications Secretary*



During its flight, NASA's Galileo spacecraft returned images of the Earth and Moon. Separate images of the Earth and Moon were combined to generate this view. <http://photojournal.jpl.nasa.gov/catalog/PIA00342>. Image credit: NASA/JPL/USGS.

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Newsletter of the Astronomy Club of Akron

c/o Marissa Fanady, Editor

1714 Toepfer Rd.

Akron OH, 44312

The Astronomy Club of Akron

c/o Nick Mihiylov

13495 Mogadore Avenue NW

Uniontown, Ohio 44685-9347

Yes! I want to become a member of the Astronomy Club of Akron

www.acaoh.org

(PLEASE PRINT)

NAME: _____ PHONE: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

EMAIL ADDRESS: _____

Astronomy Club of Akron annual memberships renew in the month of September.

ADULT (ages 18 and older) ___\$30.00

JUNIOR (ages 12 to 17) _____\$15.00

ADDITIONAL ADULT member ___\$15.00

FAMILY MEMBERSHIP _____\$40.00

Visit us on the Web at www.acaoh.org,