The President’s Column
By John Shulan

Time to dust the snow off our telescopes and go outside. Orion shines brightly overhead. Ron had opened the Observatory last week and sky was outstanding! We have an upcoming Messier Marathon. Clear sky charts your merit finalist and hope for clear skies for there to divisions in this fine competition. There is the “GoTo” division for those who are adapt at pushing buttons, and there is the "Manual” division for those who know how to read sky chart and know constellations. If you have never been in this event, you should try it is fun, it is a learning experience and comradery is exceptional.

The Rotary Clubs of Northeast Ohio have approved our grant request for a solar telescope. They are awaiting to see their budget to determine the amount of the grant. On March 30th, Astronomy Magazine will announce its winner of a $2,500.00 grant. Our club has done outstanding outreach and I hope we might win. A solar scope is getting closer to reality!

Be sure to attend the March meeting for Anne Ferrell has lined up another Outstanding NASA speaker.

With warming thoughts and clean lens,
John

Article by John Shulan, 
ACA President.

"Look up at the stars and not down at your feet. Try to make sense of what you see, and wonder about what makes the universe exist. Be curious." —Stephen Hawking
OFFICERS 2014 – 2016

President
John Shulan
Phone: 330-836-0800  E-mail: john@shulans.com

Vice President
Ann Ferrell
Phone: 330-697-7279  E-mail: annhagemaster@gmail.com

Treasurer
Glenn Cameron
Phone: 330-737-1472  E-mail: glenn@cameronclan.org

Secretary
Lew Snodgrass
Phone: 330-867-4800  E-mail: CHRPLY@aol.com

Assistant Secretary/Treasurer
Cathy Loboda
Phone: 330-655-2923  E-mail: cnloboda@aol.com

Observatory Director
Ron Kalinoski
Phone: 330-837-5848

ACA Webmaster
Dave Jessie
E-mail: DJessie@neo.rr.com

Publications Secretary - Editor, Night Sky Newsletter
Jason Shinn
Phone: 330-685-5382  E-mail: jgshinn2014@gmail.com

Trustee
Fred Huffman
E-mail: trusstube2@gmail.com

Trustee
Gregg Crenshaw
E-mail: rigelstarman@gmail.com

Trustee

Statutory Agent
Mark Kochheiser
Phone: 330-882-3713  E-mail: mkochheiser@neo.rr.com

OTAA Representative
Lou Poda

February Treasurer’s Report
By Glenn Cameron
2/1/2015 Through 2/28/2015

CHECKING BEGINNING BALANCE: $2,823.27
Income
Dues 80.00
Total Income $80.00
Expenses
Total Expenses -$100.81
Income Less Expenses -$80.80
CHECKING ENDING BALANCE: $2,903.27

SAVINGS BEGINNING BALANCE: $2,580.07
Earned Interest 0.06
SAVINGS ENDING BALANCE: $2,580.13

PETTY CASH BEGINNING BALANCE: $50.00
PETTY CASH ENDING BALANCE: $50.00

GRAND TOTAL: $5,533.40

Article by Glenn Cameron
ACA Treasurer.
FOR SALE:

22mm Orion Epic ED-2 ED Eyepiece
25mm Orion Epic ED-2 ED Eyepiece

Asking: $25 each
Contact: Glenn Cameron
Phone: 330-737-1472
Email: glenn@cameronclan.org

FOR SALE:

Orion Sirius 40mm Plossl

Asking: $25
Contact: Glenn Cameron
Phone: 330-737-1472
Email: glenn@cameronclan.org

FOR SALE:

Meade LXD75 Mount

- Tripod.
- One counterweight.
- Autostar and battery box power supply.
- Cigarette lighter power cable.
- Selling because of upgrade to LX80 mount.
- LOCAL PICKUP is necessary.

Asking: $325 OBO
Contact: Glenn Cameron
Phone: 330-737-1472
Email: glenn@cameronclan.org

FOR SALE:

Celestron CPC Deluxe 800 HD Telescope with tripod.

Accessories:
- Celestron 1.25" eyepiece and filter kit.
- TeleVue 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 adapter.
- 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:

Teleview Radian 12 mm Eyepiece

- Excellent condition.

Asking: $180 (cash)
Contact: Fred Fry
Email: riverfry@gmail.com

FOR SALE:

Teleview Radian 18 mm Eyepiece

- Excellent condition.

Asking: $180 (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 lens.
- 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.

FOR SALE:

15mm Ultra-Wide Angle Eyepiece

Asking: $40
Contact: Lew Snodgrass
Phone: 330-819-4886
Phone: 330-867-4800
Ask for Lew.
Email: chrply@aol.com

Advertise in the Swap n Shop!
Send a picture of your ASTRONOMY RELATED item and relevant information to the newsletter editor: jgshinn2014@gmail.com
NASA Chief Pilot Alan Micklewright To Speak
At March 27 ACA General Membership meeting
By Ann Ferrell

NASA Chief Pilot Alan Micklewright, will give us a "Bird's-Eye" view from the cockpit of a S-3B "Viking" aircraft used for Earth studies in and around Lake Erie. The S-3B carries surface and subsurface search equipment which collects, processes, interprets and stores data.

Alan J. "Al" Micklewright serves as Chief of Aircraft Operations at the National Aeronautics and Space Administration's John H. Glenn Research Center, Cleveland, Ohio. He was selected for this position in September, 2007 and serves as Glenn's Chief Pilot. Prior to assuming his position at Glenn, Micklewright was an Operations Analyst with General Dynamics Information Technology supporting Naval Air Station Patuxent River, Maryland. During his military career with the U.S. Navy from 1985 through 2005, he served as a Navy Aerospace Engineering Duty Officer. Other positions include S-3B Pilot, Instructor Pilot, Developmental Test Pilot, Officer-in-Charge, Safety Officer and Maintenance Quality Assurance Officer. Micklewright is an experienced Naval Aviator with over 4,200 hours of flight time in more than 30 different aircraft types including the S-3B and T-34C aircraft. After retiring from the U.S. Navy in 2005, Micklewright was on the faculty of the Defense Acquisition University until 2006. He presently is an adjunct faculty member at Embry-Riddle University where he teaches courses including Aviation Safety, Human Factors, Systems Safety, Life Cycle Analysis and Management, Aircraft Accident Investigation and Safety Programs. Micklewright earned his bachelor's degree in aeronautics and a master's degree in aeronautical science from Embry-Riddle Aeronautical University. He earned a second master's degree in management from the Naval Postgraduate School. He is also a graduate of the United States Naval Test Pilot School and the Naval School of Aviation Safety.

Article by Ann Ferrell,
ACA Vice President.

BALDWIN WALLACE UNIVERSITY
BURRELL OBSERVATORY OPEN HOUSE
FRIDAY MARCH 20, 2015 7:30PM
By Dave Jessie

LECTURE ON
“FASTER THAN LIGHT? COSMIC JETS FROM SUPER-MASSIVE BLACK HOLES”
BY
Dr. DANIEL HOMAN

The Burrell Observatory is proud to host an open house program on Friday March 20, 2015 at 7:30PM – Lecture at CIG Building.
Dr. Daniel Homan, Associate Professor and Chair of the Physics Department at Denison University, will present a lecture on apparent ‘faster-than-light’ jets emerging from the centers of distant active galaxies. After the lecture the Burrell Observatory will be open for viewing, weather permitting.
This is a free lecture and no reservations are required. The CIG is located the East side of Front Street, North of Bagley Road, at 340 Front Street. Parking is available behind CIG and adjacent to the Observatory off Fifth Avenue West. For questions, contact the Observatory Director at gkader@bw.edu or the Department of Physics and Astronomy at 440-826-2312. L.B.’s Café will be open for coffee and other refreshments.

Article submitted by Dave Jessie,
ACA Webmaster.
Akron Physics Club Meeting
Our next meeting will be Monday, March 23, 2015
At The Tangier, 532 West Market
6:00pm Socializing --- 6:30pm Dinner ---Program about 7:30

The charge for each dinner will be $20
Dinner reservations must be made by THURSDAY March 19th
Please email the names of people in your party to: akron.physics.club@gmail.com

Please use this email for reservations, for updates on email addresses,
or to discontinue receiving these announcements.

VISITORS ARE WELCOME --- COLLEGE STUDENTS ARE FREE
[College students having dinner: Please identify yourself as a student.]
Anyone is welcome to attend the free presentation starting at about 7:30 pm.
But if you would like to have dinner, you will need a reservation.

The Speaker at this meeting will be:
Dr. Nicole Steinmetz, Case Western Reserve University
School of Medicine

She will be speaking on
From Black-Eyed Peas to Biomedical Nanotechnology

Abstract: Sizing and shaping of nanostructured features with temporal and spatial control is a key opportunity to produce the next-generation of higher-performing products with diverse applications in medicine. Nanoscale self-assembly is a technique that Nature masters with atomic precision; genetic programming provides the highest achievable reproducibility. Therefore we turned toward the study and application of Nature’s nanomaterials, specifically the structures formed by plant viruses. Plant viruses come in many shapes and sizes but most species form highly uniform structures. The manufacuring of plaat virus-based biomaterials is highly scalable and economic through molecular farming in plants. Viruses have naturally evolved to deliver cargos to specific cells and tissues; and the medical research thrust in my laboratory is aimed at understanding these natural properties for effectively tailoring tissue-specificity for applications in molecular imaging and therapeutic interventions. In this presentation, I will discuss recent our efforts focused at shaping and engineering plant virus based carriers for applications in molecular magnetic resonance imaging as well as drug delivery and immunotherapeutic approaches targeting oncological and cardiovascular diseases.

Biosketch: Nicole F. Steinmetz, Ph.D.: Dr. Steinmetz is an Assistant Professor of Biomedical Engineering at Case Western Reserve University School of Medicine, Cleveland, OH, where she is leading a research laboratory interfacing of bio-inspired, molecular engineering approaches with medical research, technology development, and materials science. Recognizing the interdisciplinary nature of the research, Dr. Steinmetz holds secondary appointments and is a trainer in Radiology, Materials Science and Engineering, and Macromolecular Science and Engineering, Pathology, Pharmacology, molecular Virology. Dr. Steinmetz trained at The Scripps Research Institute, La Jolla, CA, John Innes Centre, Norwich, UK (PhD in Bionanotechnology), and RWTH-Aachen University in Germany (Masters in Molecular Biotechnology). Dr. Steinmetz was named a Crain’s Cleveland Business 40 under 40 honoree (2014); in 2011, and was named Mt. Sinai Scholar. She is a 2009 recipient of the NIH/NIBIB Pathway to Independence Grant (K99/R00), a previous American Heart Association Post-doctoral Fellow, (2008-2009) and former Marie Curie Early Stage Training Fellow (2004-2007).

Dr. Steinmetz serves on the Editorial Board of Wiley Interdisciplinary Reviews (WIREs) on Nanomedicine and Nanobiotechnology; she serves on the Advisory Editorial Board for the ACS journal Molecular Pharmaceutics. Dr. Steinmetz has chaired symposia at ACS and MRS; she is the Session Chair for the Protein and Viral Nanoparticle Track at FNANO and the Co-Chair of the Gordon Conference of Physical Virology (2015). Dr. Steinmetz has authored more than 60 peer-reviewed journal articles, reviews, and book chapters; she has authored and edited books on Virus-based nanotechnology. Research in the Steinmetz Lab is funded through grants from Federal agencies, National Institute of Health, National Science Foundation, Department of Energy, and private foundations, including Susan G. Komen Foundation and American Heart Association.

Join us for this interesting evening discussing the forefront of biomedical technology
The following events are open to the public. Please join us for stargazing and educational activities.

- Events will be cancelled if skies are cloudy. If skies are questionable, please call for the latest information: 330-837-5848
- This is an outdoor activity in an unheated environment. Nighttime temperatures drop rapidly, even during summer. A general rule of thumb is dress for 15 degrees colder than predicted nighttime low temperature.
- Please be considerate of those who bring their own telescopes. Children should be supervised at all times. Pets should be left at home.
- Please, no smoking in or near the observatory or on the surrounding grounds where club members have set up their telescopes.

**March 14 – 7:30pm** See the Orion Nebula, one of the most spectacular celestial objects, with our 16” observatory telescope. We’ll also view the Hyades, Pleiades, & Beehive star clusters.

**March 21 – 7:30pm Special Event:** Messier Marathon – stay all night to observe all 110 Messier objects with ACA members. We’ll have the Best Free Coffee in Akron brewing all night.

**April 11 – 8:00pm** Planet observing tonight: Venus will be within 3 degrees of the Pleiades, Jupiter and Ghost of Jupiter are well-placed for observing in the evening sky.

**April 18 – 8:00pm** Galaxy Night: Come out tonight to observe Bode’s Galaxy, Cigar Galaxy, & Whirlpool Galaxy.

**May 9 – 8:30pm** We will try to spy elusive Mercury at sunset. Venus & Jupiter will also be targets of observation.

**May 16 – 8:00pm** Telescope Seminar: Our members will describe advantages & disadvantages of each type of telescope. We’ll also be observing Double Stars & Galaxies.

**May 23 – 8:45pm** Come out to see a 5 day old Moon. This is one of the few star parties where we do lunar observing. See craters, mountains, rills, & maria (seas) on the lunar landscape.

**June 6 – 9:00pm** View Venus at greatest eastern elongation.

**June 13 – 9:00pm** View Saturn, its moons Titan, Rhea, & Dione, and famous Cassini Division within ring system.

**June 20 – 9:00pm** Come out early to view 4-day old Moon; then observe Saturn and its magnificent rings tilted 24 degrees as seen from Earth.

**July 11 – 9:00pm** Observe asteroid Pallas shining at magnitude 9.6. Pallas is the third largest asteroid by mass with diameter 338 miles. Saturn is still well-placed for evening viewing.

**July 18 – 9:00pm** Tonight we’ll be observing double stars: optical doubles, visual doubles, and multiple star systems.

**August 8 – 9:00pm** View Messier objects of the constellation Sagittarius: Swan Nebula, Globular Cluster M22, Butterfly Cluster, and more.

**September 5 – 8:00pm** Presentation: Mathematical Illustration of Time Dilation Observing session to follow: Summertime Open Clusters

**September 12 – 8:00pm** Planetary Nebulae Night: Ring Nebula, Cat’s Eye Nebula, Blue Snowball, Blue Flash Nebula, & Blinking Nebula.

**October 3 – 7:15pm** Observe Neptune shining at 8th magnitude. Wild Duck Cluster is still well-placed for evening observing – a gem!

**October 10 – 7:15pm** Tonight we’ll be viewing asteroid Vesta shining at magnitude 6.4. Vesta is second largest asteroid by mass.

**October 17 – 7:00pm** View 5-day old Moon, Andromeda Galaxy, ET Cluster, Blue Snowball Nebula, Saturn Nebula & Herschel’s Double Cluster.

**November 7 – 7:00pm** Come out this evening to view Uranus, the 7th planet in the Solar System.

---

*** We hold unscheduled star parties when skies are clear. For an e-mail notification of impromptu star parties send a message to ACAstarparty@att.net to be added to the list. For private star parties (Boy Scouts, Girl Scouts, Church Groups, School Groups, etc.) send a request to the same e-mail address.
The Night Sky
Newsletter of the Astronomy Club of Akron
c/o Jason Shinn, Editor
1026C Rocky Brook Dr.
Akron, OH 44313

---

<table>
<thead>
<tr>
<th>The Astronomy Club of Akron</th>
</tr>
</thead>
<tbody>
<tr>
<td>c/o Glenn Cameron</td>
</tr>
<tr>
<td>8019 Glendevan St. NW</td>
</tr>
<tr>
<td>Massillon, OH 44646-9018</td>
</tr>
</tbody>
</table>

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 May.

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADULT (ages 18 and older)</td>
<td>$30.00</td>
</tr>
<tr>
<td>ADDITIONAL ADULT member</td>
<td>$15.00</td>
</tr>
<tr>
<td>JUNIOR (ages 12 to 17)</td>
<td>$15.00</td>
</tr>
<tr>
<td>FAMILY MEMBERSHIP</td>
<td>$40.00</td>
</tr>
</tbody>
</table>

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