



The Night Sky

The Newsletter of
The Astronomy Club of Akron

www.acaoh.org

Volume 35 Number 4

April 2013

Next Meeting: Friday - April 26, 2013 - 8:00 PM - Kiwanis

The President's Column

By Gary Smith

Hello to all star gazers and comet watchers of 2013. The year 2013 is shaping up to deliver a record setting year of astronomical discoveries as well our standard routine of scanning the skies, looking for our familiar stars and constellations.

But first, let's hear from the earth's most famous telescope & observatory, the Hubble Space Telescope. The discovery of supernova UDS10Wil was announced earlier this month. The most important reason for tracking supernovas is to use them to measure cosmic distances. Supernova UDS10Wil is more than 9 billion light years distant and is the furthest Type Ia known at this time.

The world of physics is excited about the discovery of the Higgs Boson (aka God Particle). The reports are using the term "near certainty" with respect to this discovery. The Higgs Boson is the most important piece of the puzzle in today's attempt to explain why atoms and subatomic particles have mass.

But let us return to the more familiar topic of finding out what is in the sky for the month of April 2013. April is the pivotal month of spring. It brings warmer weather which gives a



"Look To The Sky!" event at Akron-Summit County Public Library. From left to right are ACA members Jason Shinn, Lew Snodgrass, Bob Benedict, special guest speaker and astrophysicist Kevin Manning, ACA members Marissa Fanady, Rick Burke, and Glenn Cameron. The event also included an appearance and lecture by local meteorologist and TV celebrity Dick Goddard.

large incentive to leave the comfort of home and grab binocular and/or telescope to aid our view of the night sky. The early part of April allows us to see the legendary constellations of late winter. The constellations (or parts thereof) of Taurus, Orion, Perseus, and Canis Major lie on the western horizon at sunset. And above these constellations lie Auriga, Gemini, Canis Minor, and Cancer. This month affords the last best chance to view these constellations of the late winter.

Two of the new constellations that have arrived are Hydra and Leo. The word Hydra translates to mean "water snake". The shape of the constellation resembles a twisting snake. Hydra is the largest of the 88 constellations but contains only 3 stars of significant brightness. The brightest star in Hydra is the 2nd magnitude star Alphard (alpha Hydrae) which means "solitary one".

(con't page 6)

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March Treasurer's Report

By Glenn Cameron

3/1/2013 Through 3/31/2013

Checking Beginning Balance	\$6,106.56
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Income

0.00

Total Income	\$0.00
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Expenses

State Farm Insurance	-425.00
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Total Expenses	-\$425.00
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Income Less Expenses	-\$425.00
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Checking Ending Balance	\$5,681.56
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Savings Beginning Balance	\$6,437.32
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Earned Interest	0.27
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Savings Ending Balance	\$6,437.59
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Petty Cash Beginning Balance	\$46.66
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Dues	17.00
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Donation - ICAN Housing	7.50
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Donation	3.00
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Postage	-0.46
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Petty Cash Ending Balance	\$73.70
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Petty Cash	73.70
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Savings	6,437.59
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Checking	5,681.56
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Grand Total	\$12,192.85
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Article by Glenn Cameron
ACA Treasurer.

SWAP & SHOP



For sale:

Orion SkyView Deluxe EQ Mount w/ RA Tracking Drive and Polar Finder Scope. This has been modified to accept a standard Vixen dovetail. It has also been modified for easy removal of the accessory tray for quick transport.

Items included and their original price:

- Orion SkyView Deluxe EQ Mount \$190.00
- Orion AccuTrack SVD RA Drive \$50.00
- Polar Finder Scope \$40.00
- Losmandy Adapter Plate \$30.00
- OPT Vixen Style Dovetail Mount Adapter \$40.00

Total original value of all items - \$350.00

Asking: \$150 for all

I prefer local sale and pickup. I don't want to ship this.

Contact: Glenn Cameron

Phone: 330-737-1472

Email: glenn@cameronclan.org



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



For Sale:

22mm Orion Epic ED-2 ED Eyepiece

25mm Orion Epic ED-2 ED Eyepiece

Asking: \$40 each or \$70 for both

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:

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:

Televue Radian 18 mm Eyepiece

- Excellent condition.

Asking: \$180 (cash)

Contact: Fred Fry

Email: riverfry@gmail.com

Notes From the Editor

By Jason Shinn



Akron-Summit Public Library: “Look to the Sky”

First I would like to thank all who participated in representing the ACA at the Akron-Summit County Library on March 16th. I would also like to thank all imagers who worked so hard at your craft and allowed us to present your work in our gallery to the public. Your images were a hit! They help represent the ACA as an organization

to join! We received several inquiries about membership! Again, a BIG thank you to all who contributed!

Astronomy Day: April 20, 2013

April 20th is Astronomy Day at the Cleveland Museum of Natural History (CMNH). Again we will be representing the ACA with an information table and the wonderful images our astrophotographers have contributed. If you would like to participate be sure to contact me at truemartian@aol.com. We should arrive to set up by 9:45am.

*Article by Jason Shinn,
ACA Publications Secretary.*

Obituaries

By Dave Jessie

It is with heavy heart that I announce the following news. Honorary member, Millie Eaken, passed away Monday, March 25th. Among countless contributions to the ACA, Millie is responsible for our use of the Kiwanis Civic Center. Our most heartfelt condolences go to past member Ed Eaken at this time.

*Article by Dave Jessie,
ACA Webmaster.*

Minutes of the March, 2013 General Membership Meeting

By Ann Ferrell

8:00PM Gary Smith, our president, warmly greeted members and three returning visitors :Linnea Gunvalsen , Mike Duncan and John Gasser. Linnea's e-mail is flypapertowels@yahoo.com. John Gasser also attended our February meeting and has been to previous star parties. His e-mail is jarga864@zoominternet.net.

PROGRAM

Glenn Cameron gave a demonstration of a Virtual Star Party, a live chat and live observing hosted from the west coast (CA) every Sunday evening. Amateur astronomers from around the world also join in the discussion and live observing. Perhaps we will one day participate. Check the ACA website to find out how to log onto the Virtual Star Party and to Universe Today.

OLD BUSINESS

- The Treasurer's and Secretary's reports were noted and accepted.
- John Shulan is still in the process of making arrangements with Wolfe Creek Winery for a fund

raiser. “The stars always look better with a little wine”.

- John also met again with the Ecology Board in Bath regarding Crown Point and plans for the observatory with an East and South viewing horizon. ACA's input is needed and wanted in the overall plans in the building of and eventual participation in managing the observatory.

NEW BUSINESS

- Mark Kochheiser mentioned road construction on Rt. 619 and Manchester Rd. Several directional plans were given to circumvent ODOT.
- Mark also met with Jim Cycle, the new Portage Lakes Manager and had a successful discussion about ACA and our outreach with star parties and other Astronomy Events in the community e.g. the recent ” Look to the Sky” at the Akron Public Library. It behooves us to get in good with the Boss.
- Jason Shinn provided highlights of the library event that was also hosted by Glenn Cameron. Rick Burke received a thank you note for ACA's involvement.
- APRIL 20, 2013 is our next chance to present ACA during Astronomy Day at The Cleveland Natural History Museum from 10

a.m. – 4 p.m.

- Lou Poda provided information on current iridium flares and noted Heavens above.com as a good source.
- Rick Burke shared the magnificent Rosetta Nebula finished image he had taken last February in Key West. As we all know, Rick is the best.

WEBMASTER'S REPORT

Dave Jessie announced “Over 10,000 hits to the website last month”! We are getting better known.

OBSERVATORY DIRECTOR'S REPORT

Ron Kalinoski and Dave Jessie gave positive reviews of the LX800 Meade. The company is much stronger today and the quality of the product is very good. The LX800 is up for serious consideration. Additional information will be provided at our April /May meetings. APRIL 6TH is our next star party.

APRIL 26TH 2013 is our next ACA meeting and Dr. Daniel Rothstein, physicist, will be our speaker.

*Article by Ann Ferrell,
ACA Assistant Secretary.*

President's Column (Con't)

Hydra is home to three Messier objects. M83, or the Southern Pinwheel Galaxy, lies near the border of Hydra and Centaurus, and is approx. 15 million light years away. It is an intermediate spiral galaxy and one of the closest and most luminous barred spiral galaxies in the sky. M60 is a globular cluster about 33,000 light years distant. It contains at least 42 known variable stars and about 250 giant stars, and is approaching the Earth at 112 kilometers per second. M48 is an open star cluster lying near the border with the constellation Monoceros. In good conditions the cluster is visible to the unaided eye.

Leo is one of the larger constellations in the northern hemisphere. In mythology it was the Lion of Nemea that terrorized the town of Nemea near Corinth. Hercules fought the Lion of Nemea and won. The constellation Leo is depicted as a crouching lion, with its head outlined by six stars that form the shape of a sickle, its heart is marked by the brightest star in the constellation, Regulus, and Denebola lies on the tip of the lions tail. Leo also contains eight stars with known planets in orbit about them.

Regulus (or Cor Leonis) is the brightest star in Leo and is the 22nd brightest star in the sky. It is a multiple star system consisting of two binary systems. Denebola (the tail of the lion) is the 2nd brightest star in Leo and is the 61st brightest star in the sky. Denebola is an A-type main sequence star that is about 75% more massive than the Sun and is 36 light years distant. Gamma Leonis is the bright double star Algieba (the forehead). It is 2.28 magnitude and is the 73rd brightest star in the sky. Algieba is a visual delight. It consists of two colored giant stars that are 4.7 arcseconds apart. One is bright orange and the other is greenish yellow. Its estimated distance is 131 light years. Leo has another star worth noting,

Wolf 359. This star is a very faint red dwarf and can be seen only with a telescope. At a distance of 7.7 light years it is one of the closest known stars to earth.

There is a small group of galaxies in Leo that are well known. This is the Leo Triplet or the M66 group. It is comprised of three beautiful spiral galaxies M65, M66, and NGC 3628. M65 is an intermediate spiral galaxy about 35 million light years away. The galaxy is of note because it has little dust or gas and there is very little new star formation taking place. M66 is an intermediate spiral galaxy about 36 light years distant. It differs from M65 in that it has striking dust lanes and bright star clusters along sweeping spiral arms. There is significant new star formation. NGC3628 is an unbarred spiral galaxy about 35 million light years away. The galaxy has a significant feature of a thin, elongated region of stars and interstellar gas that extends 3/10 million light-years into space. This is known as a "tidal tail". NGC also has a broad and obscuring band of dust located along the outer edge of its spiral arms. This gives NGC3628 a

remarkable appearance.

Leo is also the home of the "Leo Ring". The Leo Ring is an Immense primordial cloud of hydrogen and helium gas in orbit of two galaxies within the constellation of Leo. Radio astronomers discovered this cloud in 1983. The GALEX satellite discovered ultraviolet emissions that astronomers at Johns Hopkins University and the Carnegie Institution for Science interpret to indicate star creation in newly forming dwarf galaxies.

The April Sky also holds a pair of favorite targets for all those planet hunters. The king of planets Jupiter, is high in the west at sunset, and provides a magnificent display until it sets at approx. midnight. The ringed planet Saturn, rises in the east at approx 10pm and is visible throughout the night.

The April 2013 night sky holds vast treasures of astronomical delights for those who seek them.

*Article by Gary Smith,
ACA President.*

NEW IMAGES (page 8) By Bob Benedict

Comet C/2011 L4 (PanSTARRS)

Location:
Wingfoot Lake

Equipment:
Canon SX40 35x zoom on fixed tripod.

Settings:
Single two second exposure, ISO 1600.

NEW IMAGES (page 8) By Rick Burke

The Rosette Nebula

This image of the Rosette Nebula in the constellation Monoceros was captured from the Florida Keys during the Winter Star Party in February 2013. It is a combination of over 5.5 hours of sub-exposures taken over 2 nights. The telescope was a Tele Vue NP127is on a Celestron CGEM mount. The camera was a QSI583wsg. Autoguiding was using PHD with an SBIG STi guide camera. The images were captured with ImagesPlus and processed with ImagesPlus and Photoshop CS6.

SUBMIT YOUR IMAGE TO THE NEWSLETTER: truemartian@aol.com
Send your image along with an information paragraph on where the image was taken, what equipment you used, and any relevant processing techniques. Remember that sharing information helps your fellow club members become better astrophotographers too!

Observatory Report

By Ron Kalinoski



On March 13th, ACA held an outreach event for the "Little Girl Scouts", Troop 90670 of Manchester, Ohio. This was a small group of 6 girls (age 6-7) and two adult scout leaders. I started the event with a telescope seminar showing the girls different types of telescopes astronomers use to observe the heavens. I also brought some optical props to give the girls a visual demonstration of some basic optical principles. Of course the laser was a big hit as with all kids. Now, projecting the laser beam on the wall and introducing a lens to show how a curved piece of glass can bend the light beam at a small angle impressed them; but when I added a prism to the

equation to bend the laser beam at a 90 degree angle, the expressions on their faces was amazement. Actually, this demonstration amazes me every time I see it; it just seems like some of the light should pass directly through the glass, but none does. We then took turns looking at a fluorescent light through a hand-held spectrometer. Viewing the bright lines in the spectrum and using a chart, they were able to determine that mercury was present inside the fluorescent light tube. We continued with a slideshow presentation featuring planets, comets, asteroids, meteor showers, and constellations. The girls asked many interesting questions and shared some of their observational experience; having seen planets, meteor showers, and one girl even saw a fireball. We closed out the event by setting up a telescope in the parking lot to observe the star Sirius.

On March 9th the clouds held back long enough for us to have our scheduled star party. About 25 people showed up, many non-members wanting to see the Orion Nebula. As usual, the nebula looked fabulous. Jupiter was also viewed as well as open clusters M37, M38, M36, M41, and planetary nebula NGC 2392 (Eskimo Nebula). Stargazers were treated to a special Columbian blend of the best free coffee in Akron. The clouds finally moved in at 9pm. Clouds were also an issue at our April 6th star party causing us to cancel our Messier Marathon. We did open the observatory and were treated to views of Jupiter displaying an eclipse of a Galilean moon.

*Article by Ron Kalinoski,
ACA Observatory Director.*

**“Though my soul may set in darkness, it will rise in perfect light;
I have loved the stars too fondly to be fearful of the night.”**

—Sarah Williams

Astronoquiz

By Marissa Fanady



“Sometimes an object and its parent body have a near equal gravitational pull on each other and actually orbit one another. When their mass is close to equal or equal, they capture each other and begin a dance that's truly astronomical. What object in our solar system and its parent body orbit each other?”

Last Month's Quiz Answer

Now for the moment you've been waiting for! The answer to last months question is... the seven

classical objects of astronomy which are the Sun, Moon, Mercury, Venus, Mars, Jupiter, and Saturn. Back when light pollution was a long way off from even being dreamed of, our ancient ancestors had a perfect dark sky. Along with observing the Sun and Moon move across the sky, which is very hard to miss, they also noticed five other points of light move against the still stars at night. People believed these objects must be very powerful and therefore must be Gods. They decided to honor these "Gods" and devote an entire day to worship one of them. They named the day after the object they decided to give thanks to that day and so we now have the days of the week! Sunday is of course for the Sun, Monday for the Moon, Tuesday is for Mars, Wednesday they worshiped Mercury, Thursday was for

Jupiter, Friday was named after Venus, and last but certainly not least Saturday was named for Saturn.

Bonus question answer

The very first people to notice these bodies and name the days of the week were the Babylonians, later the Romans and other civilizations adopted this concept.

I hope you enjoyed last months question and found it educational and entertaining! Again if you have any comments or want to submit a question please feel free to email me at speedymissy@yahoo.com

*Article by ACA member
Marissa Fanady.*

NEW IMAGES



by Bob Benedict



by Rick Burke

THE ASTRONOMY CLUB OF AKRON
APRIL 2013 ACTIVITIES CALENDAR

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3 Last Quarter 4:38UT 	4	5	6 ACA OBSERVATORY PUBLIC EVENT 8:00p
7	8	9	10 New Moon 9:38UT 	11	12	13 ACA OBSERVATORY PUBLIC EVENT 8:30p
14	15 Moon at apogee (farthest) at 22h UT.	16	17 First Quarter 12:31UT 	18	19	20 ASTRONOMY DAY OUTREACH EVENT AT CMNA 10a - 4p
21	22 LYRID METEOR SHOWER PEAKS AT 11:30UT	23	24 Full Moon 19:59UT PARTIAL LUNAR ECLIPSE FROM 18:03-11:11UT 	25	26 ACA MEMBERSHIP MEETING (KIWANIS) 8:00p	27 Moon at perigee (closest) at 20h UT.
28 Saturn at opposition at 8h UT.	29	30				

The Night Sky

Newsletter of the Astronomy Club of Akron

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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.

ADULT (ages 18 and older) ___\$30.00

JUNIOR (ages 12 to 17) _____ \$15.00

ADDITIONAL ADULT member ___\$15.00

FAMILY MEMBERSHIP _____ \$40.00

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