



THE OBSERVER

East Valley Astronomy Club



[Omega Centauri - The Brightest Globular Cluster](#)
[APOD April 27, 2016](#)
[Image Credit & Copyright: Roberto Columbari](#)

UPCOMING EVENTS:

- Public Party - May 12*
- EVAC Monthly Meeting - May 19*
- Local Star Party - May 20*
- Deep Sky Party - May 27*
- Check out all of the upcoming club events in the Calendars on page 11.*

INSIDE THIS ISSUE:

EVAC This Month

by Don Wrigley

May is the third month in the old Roman calendar and if we are to accept Ovid's etymology, in which he says that the month of May is named for the maiores, Latin for "elders," then we might assume that this month is the perfect time for some of us "elder" astronomers to dust off our telescopes and get some observing time in before the monsoons (and the heat) set in. Cold weather observing does not hold the same charm for me as it did twenty years ago when it just meant putting on some warmer clothing. Now I get cold just thinking about it, and so I've come to really love the month of May, when it doesn't get dark too early or get too cold and there are lots

and lots of galaxies to hunt.

If you are suffering from aperture fever and can't afford (or are unwilling to haul around) that big Dob you always dreamed of owning, there is another alternative: come to our May meeting and listen to our guest speaker, Rogier Windhorst. This ASU professor has been involved with the evolution of the Hubble Space Telescope imaging, and the development of the James Webb Telescope. Hear the latest on telescopic imaging.

Another reason to attend the May meeting is to learn more about the Starbeque and auction to be

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EVAC This Month

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at the June meeting. EVAC has recently become the recipient of a large assortment of telescopes and telescopic equipment, from the estate of the late Robert Woodruff, thanks to a generous donation by his sister Peggy Tallman. More information will be provided elsewhere in this newsletter and later on at

out website, with information pertaining to the rules for the sale at the June meeting.

That's all for now!

Don Wrigley

If It's Clear...

by Fulton Wright, Jr. Prescott Astronomy Club

May 2017

Celestial events (from Sky & Telescope magazine, Astronomy magazine, and anywhere else I can find information) customized for Prescott, Arizona. All times are Mountain Standard Time.

Comet hunters, check out Sky & Telescope, May 2017, p. 50 for information about comets this month.

On Tuesday, May 2, the Moon is at first quarter phase and sets at 1:39 AM (Wednesday). The phase occurs at 7:48 PM (Tuesday). You might want to check how close to half lit the Moon appears at that time.

On Wednesday, May 10, at 7:19 PM, the full Moon rises spoiling any chance of hunting for faint fuzzies for the night. At 11:20 PM the full Moon occults the 4th magnitude star, Gamma Librae. The star reappears at 12:52 AM (Thursday). This will be a difficult observation because of the glare from the full Moon. Use a big telescope and high power.

On Thursday, May 18, the Moon is at last quarter phase and rises at 1:31 AM (Friday). From 8:53 PM (Thursday) to 9:38 PM, both Io's and Europa's shadows will be on Jupiter.

On Thursday, May 25, it is new Moon and you have all night to hunt for faint fuzzies.

From 10:47 PM to 12:14 AM (Friday), both Io's and Europa's shadows will be on Jupiter.

On Sunday, May 28, starting about 8:00 PM, you can see Mare Crisium at its best. The phase is good and libration tips that part of the Moon toward us.

On Wednesday, May 31, at 9:28 PM, the nearly first quarter Moon occults the 4th magnitude star, Rho Leonis. The star reappears on the bright limb of the Moon at 10:37 PM. The star may be a very close double star and make its transition in two steps.

Michael Smith Videos

Michael Smith has spoken at EVAC in the past. He has created three You Tube videos that you may find interesting. The Optical Horizon video references his work on determining how far away (and into the past) we can effectively see, and is similar to a talk he made at EVAC. The Log-Transformation Problems video discusses potential errors made if data is transformed to eliminate noise, especially for distant objects. The Einstein Equation discusses the idea that Energy is SIMILAR to Mass, but may not equal in the famous

equation. These are math heavy, but are interesting none the less. Enjoy!

Optical horizon - https://youtu.be/m9fj_f9eiEk

Log-Transformation Problems - <https://youtu.be/Y1nEQmg2yJA>

Einstein Equation - <https://youtu.be/dBafh6lL9e0>

Trolling the May Skies

Leo the Lion is the signature constellation for spring, one of the few constellations that closely resembles its mythological counterpart. With the exception of the Big Dipper asterism in the north, no other spring constellation is so conspicuous. Looking south, Leo crosses the meridian leading with its famous “backwards question mark” asterism representing the front of the Lion. This star pattern has also been referred to as the “Sickle” or “Hook.” The bottom star is Regulus, Latin for “Little King” and the closest bright star to the ecliptic. Regulus, magnitude 1.4, is the heart of the lion and the curved string of stars forming the top of the Sickle is the Lion’s mane. Further east is a three-star right triangle representing the Lion’s hind quarters. The eastern most star in the triangle is Denebola (Beta Leonis), Arabic for, appropriately, “Tail.”

Leo offers stargazers many treasures. Regulus itself is a wide double star with a 7.7 magnitude companion 177” away at position angle (PA) 307 degrees. A 9x50 finder will easily split it. Above Regulus is Algieba (Gamma Leonis), a striking close double star. The pair’s magnitude 2.3 and 3.6 stars, 4.4” apart, can be split at 125x. Just within the eastern triangle stars is the triple star 90 Leonis. The AB pair, magnitude 6.2 and 7.3 are separated by only 3.5” while the C component is a generous 63.1” away at PA 234 degrees. Use at least 100x to split the AB pair.

Messier fans rejoice – there are five Messier Objects in Leo. All are galaxies. Clustered together under the belly of Lion midway between Regulus and Theta Leonis resides M-95, 96, and 105. Thirty million light years away, they appear modestly acceptable to galaxy hunters, neither large as closer galaxies nor as feeble as the 50 million light year distant Virgo galaxies. Ditto for M-65 and M-66 a few degrees below Theta Leonis, one of three stars

mentioned above representing the rear half of Leo. Both these galaxies fit comfortably in a low power field. Keen eyes may spy a larger, fainter galaxy, NGC 3628, about a degree north of M65/66. Somewhat ignored (even by Messier, apparently) is a nice large bright galaxy, NGC 2903, just west of the Sickle. A line from Mu and Epsilon Leonis pointing southwest takes you right to it.

It is interesting to note there are two large open clusters either side of Leo. Due west we find the Beehive Cluster, M-44, in Cancer. Best seen in large binoculars, it’s just visible to the naked eye as an amorphous patch of light. Northeast of Leo is the even larger Coma Berenices cluster. Like the Beehive Cluster, it’s another nebulous cloud of unresolved stars but much larger. You’ll need a normal sized binocular with a field of at least six degrees to scoop up its stars.

Unless you’re at dark sky site, the area below Leo will look like a giant black hole. But there is a faint constellation spanning this emptiness - Hydra, the Water Snake. It may be dim but it’s the largest and longest of the 88 constellations. Hydra’s brightest star, second magnitude Alphard, “The Solitary One” stands alone guarding the Big Void under the Lion’s belly. An interesting challenge to the stargazer is to identify the meandering stars forming the constellation, from the Snake’s head directly below the Beehive Cluster to the tip of the Snake’s tail just west of Libra. Along the way, pull off the starry path and take a look at a few of the sites along the way like NGC 3242, a fine planetary nebula (“Ghost of Jupiter”). Slithering on to the extreme eastern end of Hydra, you’ll find the globular cluster M-68, and galaxy M-83. They won’t knock your socks off but beggars can’t be choosers. After all, you are...in The VOID.

Find Out What's Happening – Join EVAC-Announce List

If you would like to receive email announcements about EVAC meetings and activities please join the EVAC–Announce mailing list. Click on the link below to subscribe. Enter your full email address in the box titled User Options and press OK. You will receive a confirmation email. Your privacy is respected by EVAC and we will never sell your email address, or use it for non-club relevant solicitations. This mailing list is designed for communication from EVAC, and does not enable users to respond to the message. If you wish to contact club officers, please use the list on the Contact-Us tab. To subscribe to the EVAC – Announce mail group click: <http://www.freelists.org/list/evac-announce>

To unsubscribe use the same link, enter your email address and select Unsubscribe from the “Choose An Action” list.

Looking for that perfect weekend activity?

Why not resolve to getting involved?

Contact Claude Haynes to join the staff at GRCO

Email: grco@evaconline.org

Items from the estate of Robert Woodruff



**iOptron Mini Tower
Includes carrying case**



**Lunt LS60T Ha
Tilt Tuned Solar Scope
Includes carrying case
TeleVue Sol Spotter
(no eyepiece)**



**Questar Duplex
Telescope w/ Mount
(some damage to
leather case)**



**8" Celestron OTA
Celestron CGEM
w/ travel cases**



**Hubble Optics
16" Ultralight
w/ light shroud**



**Observing
Chair**



20mm/40mm x 100
Binocular w/ case
(may be Barska)



Orion Resolux
15x70 Binocular
with case



Celestron
20x80 Binocular
with case

Many Other Items

- 5" Celestron Telescope w/ mount (orange tube – two of these)
- Tasco Binocular
- Bell & Howell Zoom Binocular
- Numerous Tripods
- Books and Observing Aids
- Table Top Telescopes (Meade and Pentax – two of these)
- Tube Rings
- Jason 90mm Telescope w/ wooden case (1970 Retro Model)
- Eyepieces
- Filters
- Diagonals, and MORE!

To be sold at the June EVAC meeting (June 16)

All items are sold AS IS!

Purchaser must pay for and remove items at time of sale

Classified Ads

AstroTrac TP3065 Pier for Sale

The pier is about 2 years old and I am the original owner. The pier is in like new condition. The pier has been modified to allow more vertical adjustment in the 3 feet. Detailed pictures available on request. I will drive up to 3 hours to deliver the pier. Buyer pays half the shipping costs. I will cover additional insurance costs. Bank check or cash only. CONUS

Asking \$250 OBO. My cost new was - \$495.00

Included Items:

Mounting Plate

Adjustable Feet

Carry Bag for Legs

Stainless Steel Tensioners

Soft Carry Bag

19 pound cylindrical weight to provide additional stability (Will not ship the weight)

Jim jimwaters@cox.net



FIRST QUARTER MOON ON MAY 2 AT 22:47

FULL MOON ON MAY 10 AT 17:42

LAST QUARTER MOON ON MAY 18 AT 20:33

NEW MOON ON MAY 25 AT 15:44

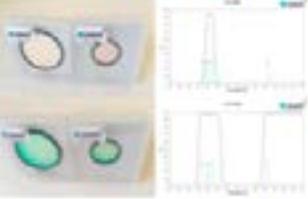


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Upcoming Meetings

May 19

June 16

July 21

September 15

October 27

November 17

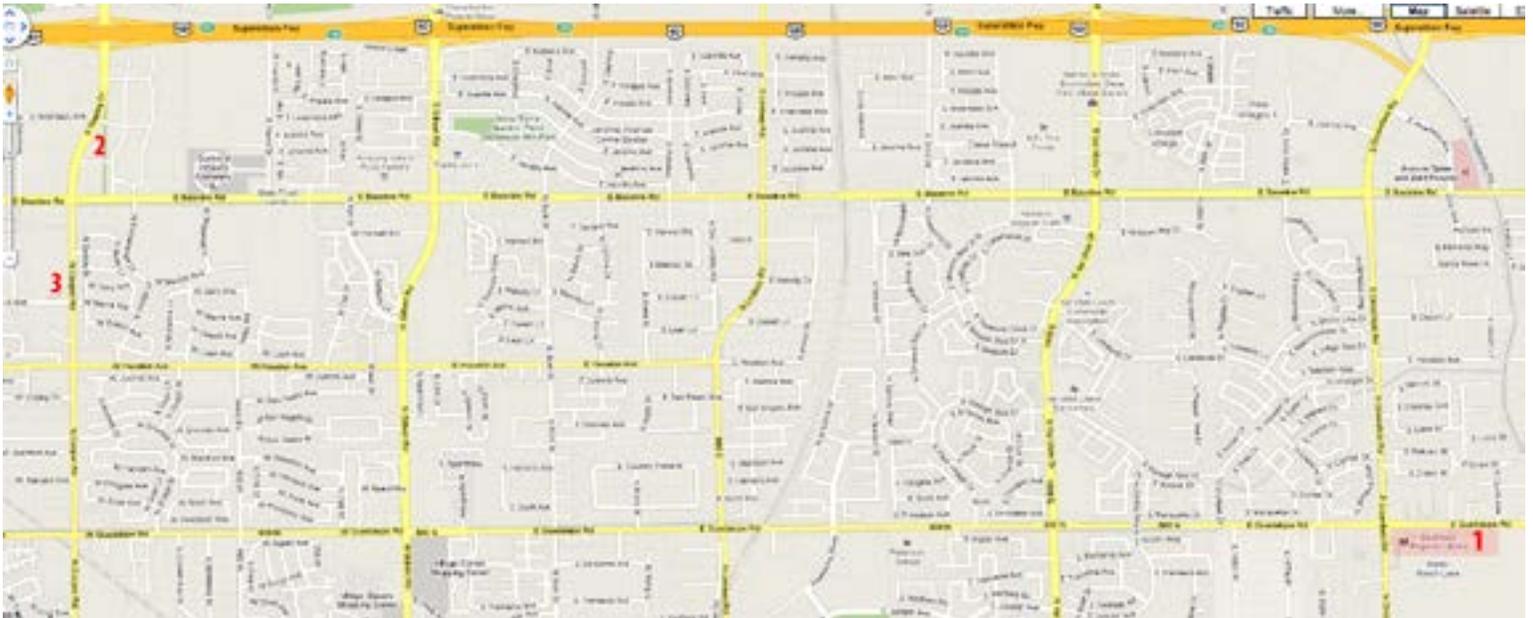
December 15

January 19

The monthly general meeting is your chance to find out what other club members are up to, learn about upcoming club events and listen to presentations by professional and well-known amateur astronomers.

Our meetings are held on the third Friday of each month at the Southeast Regional Library in Gilbert. The library is located at 775 N. Greenfield Road; on the southeast corner of Greenfield and Guadalupe Roads. Meetings begin at 7:30 pm.

Visitors are always welcome!



1 Southeast Regional Library
775 N. Greenfield Road
Gilbert, Az. 85234



MAY 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

May 12 - Public Star Party

May 20 - Local Star Party

May 19 - EVAC Monthly Meeting

May 27 - Deep Sky Party

JUNE 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

June 9 - Public Star Party

June 17 - Local Star Party

June 16 - EVAC Monthly Meeting

June 24 - Deep Sky Star Party

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www.evaonline.org

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