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 Astronomical League

April, 2014

# The Guide Star

Journal of the Amateur Astronomers Association of Pittsburgh, Inc.  
 AAAP founded June 9, 1929 by Chester B. Roe and Leo J. Scanlon

Volume 48, No. 3.0



Nicholas E. Wagman  
 Observatory



Mingo Creek Park  
 Observatory

## Mingo and Wagman, Starting @ Sunset

### Planets 4-5-6 Highlight April 4-5 Star Parties



Perhaps you have seen Mars, Jupiter and Saturn (Planets 4-5-6) hundreds or even thousands of times in your observing career. Did you ever notice that these and the other planets always seem “fresh” at the start of a new star party season, despite so many prior observations? You can put this principal to the test at the [April 4](#) and [April 5](#) star parties, Wagman and Mingo Observatories, starting at [Sunset](#). Jupiter is smack-dab in the middle of Gemini, while Mars and Saturn are loitering across the sky in Virgo and nearby Libra, respectively. Of course, the western sky still sparkles with Orion and company. As such, the April 4 and 5 star parties also represent a last good chance to observe the many fine deep sky objects in this area, especially through the club’s four main observatory scopes.

(Continued on page 4, column 2)

## Wagman and Mingo

### April 14-15: “Wee Hours” Lunar Eclipse Star Parties Scheduled

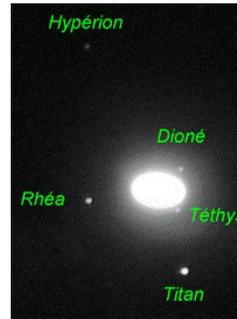
“Why can’t they schedule these events for a more convenient time?”. Alas, Mother Nature is indifferent to our star party scheduling. But we’ve decided to stage overnight star parties on the evening/morning of [April 14-15](#) to observe the first of this year’s two Total Lunar Eclipses. SPs will be held at both Wagman and Mingo Observatories.



Wagman Director [Tom Reiland](#) reports “*Partial eclipse of the Moon begins shortly before 2 AM and totality starts at 3:07 AM EDT. Mid-eclipse is at 3:45 and totality ends at 4:25 AM. Partial eclipse ends at 5:33 AM. Guests will also have the opportunity to observe Mars and Saturn and other celestial wonders during this event.*” Note: If you can’t attend this star party because of work or other factors, we would appreciate your at-home observations and/or images of the eclipse.

## “Observing Minor Moons of the Solar System”

### Terry Trees to Sub for Scheduled Quest Speaker at April 11 CSC Meeting



The November, 2012 AAAP meeting’s guest speaker was to have been Dr. James LoPresto who was to present on solar activity with an emphasis on the weakness of cycle 24 and a possible Maunder-like minimum starting with cycle 25. You might remember that his car malfunctioned on his way to Allegheny Observatory and he was unable to attend the meeting. Jim was kind enough to reschedule for this month’s meeting. Unfortunately, he will again be unable to attend, this time due to eye surgery. So, Jim will try again next year.

[Terry Trees](#) will substitute for him at the April meeting and present, “*Observing Minor Moons of the Solar System*”. The smaller-sized telescopes of yesterday’s visual observers have been supplanted by large

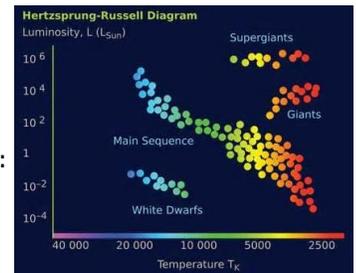
(Continued on page 4, column 2)

## Lecture Series At Mingo: April 8, 15, 22, 29

### The Birth, Life and Death of Stars – A Layman’s Perspective

by Ken Kobus

The Birth, Life and Death of Stars is a 4-week course that takes a layman’s view of the process of birthing stars. The goal of this course is to make the layman and non-scientist feel comfortable in discussing with others: the mechanisms of star formation, their trek through to middle age, what happens when stars become old and the way in which they expire.



We will discuss the methods scientists used to determine the why’s and how’s of stellar evolution and the important role played by women in developing this process. You will leave being able to understand terms like: main sequence, white dwarf, black hole, neutron star, pulsar, supernova, and quasar.

(Continued on page 5, lower right)

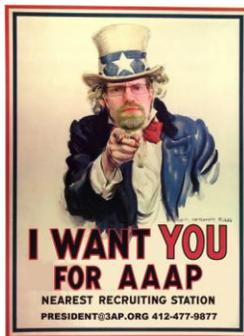
## [Nom Comm Wants to Hear From You](#)

### Interested in Becoming An AAAP Officer?

At the March meeting, **Bill Yorkshire**, **Bill Moutz** and **Rowen Poole** stepped up to serve on the Nominating Committee for the 2014-2015 officer elections to be held next month. If you are interested in running for any AAAP office (except Treasurer, which is on a 5-year term), please contact any of these three gents for details such as member eligibility, responsibilities of the offices, etc.

We encourage all members, new or long-term, to consider running for office. Rowen and the Bills can be contacted as follows:

- **Bill Yorkshire** (Chair): Phone: 412-793-9552, e-mail: [wildyork@verizon.net](mailto:wildyork@verizon.net)
- **Rowen Poole**: Phone: 724-502-2119, e-mail: [persephone1@mindspring.com](mailto:persephone1@mindspring.com)
- **Bill Moutz**: Phone: 412-795-1730, e-mail: [sailboat25@verizon.net](mailto:sailboat25@verizon.net)



## April Listservings

(A sampling of "e-chatter" on the AAAP's Internet Listserver)

- In case you missed the special addendum (Rev. 2.1) to the March Guide Star, "Wagman Winterfest" was cancelled last month because of cold, spritz rain showers. Ironically, it was a case of "Zapadka's Law" in reverse. The weather was fine on the Friday before and the Sunday after the star party, the reverse of many previous years.
  - Big thanks goes out to **George Guzik** for his fascinating Chile travelogue at the March 14 meeting. Despite the long distances, thin air, low blood oxygen levels, harsh conditions in general and limited personal accommodations, George said he would repeat the whole adventure leading up to the ALMA observatory array.
  - On a related matter, we incorrectly listed the author of the YouTube video link (in the March newsletter) as **Fred Klein**. The clip was actually made by Shemyr, one of the guides on the Chile expedition.
  - Another big thanks goes out to member **Bill Moutz** for calling the City of Pittsburgh about the awful condition of the road leading up to Allegheny Observatory (resembling the Lunar South Pole regions in places).
- 
- In his compliant, Bill noted "Many folks volunteer there to share the night sky to the public. Some folks actually work there to do research on the night sky. The least the city could do would be to patch the many pot holes on that road surface." Subsequently, **Art Glaser** noted work had been done to fill the worst of the potholes. More repairs may be coming this Spring.
- Astronomers Bucket List Alert: Congrats to **Tom Reiland** for making a quite rare, simultaneous observation (3-31) of two major asteroids in his binoculars: "Wow! I just made an observation that I never thought about trying before this month. I viewed two asteroids in the same field of view in my 10 X 50 binoculars. Vesta and Ceres were easy to locate in Virgo NNE of Mars."

(Continued at mid-right)

## Gas Drilling Near Wagman Moves Closer to Reality

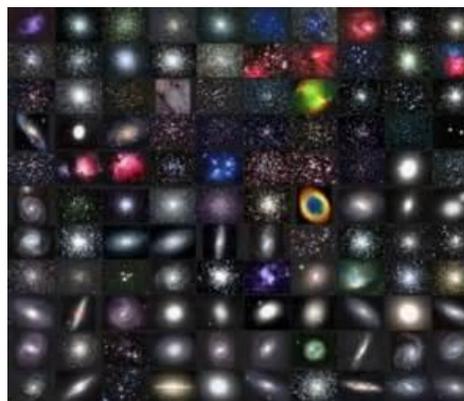
Throughout February and March, meetings and hearings were held by Allegheny County officials to authorize the start of natural gas drilling east of Wagman Observatory. Drilling would actually take place on property adjacent to Deer Lakes Park, not in the park itself, and would descend more than a mile underground before making a turn under the park.



County Executive Rich Fitzgerald and his staff have kept us in the loop on the preparations with Range Resources, and have been sympathetic to our concerns about light pollution from the drilling rigs. Following are several Pittsburgh Post-Gazette articles that provide more details about the drilling program. Note that the second article discusses the light pollution issue:

- Agreement Announced: <http://www.post-gazette.com/local/north/2014/03/17/Fitzgerald-to-discuss-status-of-Marcelluys-Shale-drilling-proposal-under-Deer-Lakes-Park-today/stories/201403170148>
- Protecting Wagman Sky: <http://www.post-gazette.com/local/north/2014/03/29/Shale-natural-gas-drilling-Wagman-Observatory-Deer-Lakes-Park/stories/201403290106>

- AAAP members are reminded that we are in the prime time of the year for conducting a "Messier Marathon". Under ideal conditions, you can observe almost all (if not all) of the Messier Objects in a single dusk-to-dawn period. And even if the prime late-March/early April period passes, no reason not to grab a large number of MOs in one night. **Tom Reiland** was among the initial creators of the Marathon back in the early 1980s. For more details, simply Google the Messier Marathon Wikipedia page or talk to Tom at an upcoming star party.



- Once again, our astro-imager extraordinaire **Bill Snyder** captured another APOD slot with the posting of his M-63 "Sunflower Galaxy" image on March 13. This image appears in last month's Guide Star. At this point we are running out of superlatives for Bill's work.
- Wagman Director **Tom Reiland** extends thanks to all who helped out with the observatory clean up on March 22: "Thanks to **Flacc Stifel**, **Fred Klein**, **Bill Yorkshire**, **Rowen Poole**, **Kelly Fletcher** and **Mary DeV Vaughn** for their assistance today....Flacc was measuring the plastic material that will enclose the Manka tube and several of us moved Leo's Springfield Mount tube outside to be photographed. Fred and Bill did the vacuuming and Mary did dusting. I cleaned out the frig and lots of stuff was removed for trash and recycling."

## Astro-Atmo Images for April

Solar Pillar No. 1, by **Fred Klein**: In the March [Guide Star](#), we had the right link but the wrong image of Fred's solar pillar image. Here is the correct (and quite stunning) version.



Galaxy NGC 2903, by **Bill Snyder**: "This is an LHaRGB image of about 18hrs of data. It has a large amount of Ha in it as can be seen in the separate data sets on the webpage. This was taken with a Planewave 17in and Apogee U16 CCD from SRO in CA."



Solar Pillar No. 2, by **Bill Hayslip**: "I caught a small Solar Pillar on the evening of March 23. It didn't get very high and didn't last very long, but with the cold and high winds I wasn't interested in watching it for very long. At least I had my camera with me for a change."



Lunar Halo, by **Rich McLaughlin**: Rich took this image on March 15 with his I-Phone. Several other AAAP members noted the almost rainbow appearance of the halo that night.



### Monthly Reminder

- **"Show & Telescope"**: If you would like to show off your new telescope, telescope design improvement, special attachments, etc., you are welcome to make a presentation at an upcoming meeting during the "Show & Telescope" segment of "All Things Astronomical". You can bring your equipment to the meeting, or show slides. Contact **Eric Fischer** at [eric.fischer69@yahoo.com](mailto:eric.fischer69@yahoo.com) or 412-487-7011 to make arrangements. Eric will also help you prepare your PowerPoint slides if needed.

## My Observing Adventure With the Mingo 10-Inch Refractor

by Chris Mullen (excerpt from AAAP Listserv)

This is my belated report about observing with the 10" scope on March 7. It was a beautiful night for it, and several members were there using both scopes. I concentrated on the 10" as practice for star parties this summer. When I got there about 7:45 (I'll miss you, Standard Time!), the group had the scope focused on Sirius, and claimed they could discern the Pup as a bump on one side of the diffraction pattern. At first, I was skeptical, but sure enough, one side was consistently further out than the others, so I had to agree.



We then looked at M42 and 43, and I appreciated the extra depth that the dark skies gave the nebula compared to suburban viewing in Mt Lebanon. After that, I started using Orion's Deep Sky 600 map as a guide for what to punch into the computer control. I found that some objects were quite enjoyable in the eyepiece, while others made me unsure if the scope was even aligned correctly, because nothing was apparent there. NGC 2354 and 2362 were our first stops, with the latter being very nice.

Then we checked out Jupiter, and that held our gaze for 30 minutes or more. We could see the shadow of Io crossing the face, and I loved being able to perceive the change in position after 5 minutes or so. I could also see details of clouds in the bands that I've never seen before. I looked hard for Io itself, but couldn't distinguish it from Jupiter's lit face. For a while, I hoped to see it emerge from the disk.

When I finally tore myself away, I heard a commotion at the other scope less than a minute later, and they reported seeing the moon. I checked it out on the 24" scope, and noticed that I could see a color difference between the moon and Jupiter. Turning the 10" back, it was easy to see Io (and it seemed clearer to me than it was on the 24"), but I could see less color (which makes sense, given the smaller aperture). Io emerged close to 10pm.

Then it was on to more NGC objects, and the challenge of how far south we could see them in Puppis. We got to about 40 degrees S. We picked up NGC 2439, 2477, 2489, then M93, M46 and M47. Travelling back north, we saw NGC 2423, 2438, and 2440, which appeared to us as a blinking planetary. Bright nebulas were difficult or impossible with the first quarter Moon nearby, but planetary nebula were still visible because they're more concentrated.

Getting away from the galactic plane, we checked out NGC 3115 (Spindle Galaxy), 3242 (Ghost of Jupiter), and then waded into the Leo galaxies. M95, M96, NGC 3384, M65, M66, and M86 were quickly ticked off. Then we just surfed around the Virgo cluster to see how many galaxies we could fit in one eye piece, and reached five.

One thing I really enjoyed about the night was sharing it with other members. For instance, I'm comforted that Gene (I don't recall his last name) could see as little structure in the galaxies as I could. Even M51, which we turned to last, didn't seem much more than a puff of haze, with a second puff nearby.

I guess it will take more practice, and perhaps darker skies, to see dust lanes there. I'm just in awe of people who can sketch galactic structures!

## Brief Bio of April Guest Speaker: Terry Trees

Terry Trees received a Bachelor of Science degree from Case Western Reserve University, a Master of Science degree from Slippery Rock University and his Doctorate from the University of Pittsburgh. He also served as an Adjunct Professor of Astronomy and Physical Sciences at a small, local university where he taught courses in astronomy, environmental sciences and information technology, both at the undergraduate and graduate levels.



Terry is approaching his 20th anniversary of AAAP membership, and is also a long-time member of both the Oil Region Astronomical Society and the Royal Astronomical Society of Canada. He is the current AAAP vice president and served as an officer in the AAAP during 6 of his first 7 years of membership: President, Vice President and Corresponding Secretary. He also acted as the Chair and Co-Chair of the Laurel Highlands Star Cruise for several years. Terry and his family have traveled to many star parties throughout the U.S. and Canada where he has presented on a number of astronomical topics.

## "Observing Minor Moons of the Solar System"

(Continued from front page)

Dobsonian telescopes. And while light pollution has limited the value of urban/suburban observing sites, many amateurs haul large light buckets to remote dark sky sites and see many objects once considered impossible to observe, including many of the solar system's smaller moons.

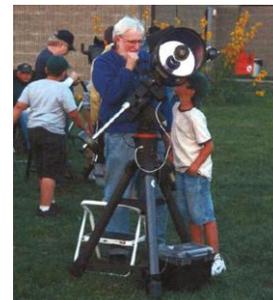
Your observing site, your scopes and the techniques you employ to observe minor moons make a big difference in what you are able to locate. These moons do not show disks, they appear as pinpoints of lights, resembling asteroids or dim stars. For most, you need to travel to dark-sky sites and you must devise fool-proof ways of identifying them. Terry's latest "capture" was Jupiter moon VI, Himalia. To date, he's seen 22 moons. See page article above for Terry's short bio.

## April 4 and 5 Star Parties At NEWO and MCPO

(Continued from front page)

Note: We hope to have the 21-inch Manka reflector at Wagman Observatory up and running, with its newly-coated optics, in time for the April star parties. The new view should be, in a word, really really really spectacular.

As always, AAAP members are asked to help out in any capacity at the star parties. You don't need a scope or even binoculars to attend. Answering the public's questions, parking cars, directing people traffic inside the buildings, or simply keeping an eye on things is greatly appreciated.



As shown in the January Guide Star, we recognize all star party helpers, even if some only attended one event. In this regard, please make sure to sign the star party log books in both observatories, and please print your name in these books, especially if your signature is on the stylish side. By the way, you can also ensure the success of the April star parties by promoting them to your friends, neighbors, co-workers and classmates. We love big crowds. See you this weekend.

## AAAP 2013-2014 Elected Officers

**President:** John Holtz, [president@3ap.org](mailto:president@3ap.org)  
**Vice-President:** Terry Trees, [vicepresident@3ap.org](mailto:vicepresident@3ap.org)  
**Treasurer:** Nate Brandt, [treasurer@3ap.org](mailto:treasurer@3ap.org)  
**Corresponding Sec:** Joanne Trees, [correspondingsecretary@3ap.org](mailto:correspondingsecretary@3ap.org),  
**Recording Sec:** Diane Yorkshire, [recordingsecretary@3ap.org](mailto:recordingsecretary@3ap.org)  
**Membership Sec:** Don Hoecker, [membershipsecretary@3ap.org](mailto:membershipsecretary@3ap.org)  
**Guide Star Editor:** Eric Fischer, [gseditor@3ap.org](mailto:gseditor@3ap.org)

## Facility Directors

### Mingo Creek Park Observatory

**Director:** Mike Meteney  
**Associate Director:** Gene Kulakowski  
**Associate Director:** Ken Kobus

### Nicholas E. Wagman Observatory

**Director:** Tom Reiland  
**Associate Director:** Rowen Poole  
**Associate Director:** Bill Yorkshire

## AAAP Executive Committee Appointees

Mike Skowvron, Chris Mullen, Joyce Osborne-Fischer, Bill Roemer

## Membership Information

**AAAP Member Dues:** \$ 30.00  
**Family Membership:** \$ 45.00  
**Student Membership\*:** \$ 20.00  
 \* K thru 12 and full time college student

## Paying Your Dues

1. Make check payable to "AAAP Inc."
2. Send check to:  
 Nate Brandt, Treasurer  
 2520 Campmeeting Rd.  
 Sewickley, PA 15143-9104

## On-Line Membership Forms

Membership **Renewal** Form available at:  
[http://www.3ap.org/AAAP\\_Mem\\_RenForm\\_dah\\_2014.pdf](http://www.3ap.org/AAAP_Mem_RenForm_dah_2014.pdf)  
 New Member Form available at:  
[http://www.3ap.org/AAAP\\_New\\_MemForm\\_dah\\_2014.pdf](http://www.3ap.org/AAAP_New_MemForm_dah_2014.pdf)

## AAAP Resource Guide

<p>Club policies, issues, Executive Committee, agenda for business meetings</p> <p>Contact President John Holtz at <a href="mailto:president@3ap.org">president@3ap.org</a></p>	<p>Dues, magazine subscriptions, making financial donations, etc.</p> <p>Contact Treasurer Nate Brandt at <a href="mailto:treasurer@3ap.org">treasurer@3ap.org</a></p>	<p>Your membership status, Membership Directory</p> <p>Contact Membership Secretary Don Hoecker at <a href="mailto:membershipsecretary@3ap.org">membershipsecretary@3ap.org</a></p>	<p>IT matters, access to AAAP website and listserver</p> <p>Contact IT Coordinator Mike Skowvron at <a href="mailto:michaels@3ap.org">michaels@3ap.org</a></p>
<p>Access/training on Wagman observatory site, building, telescopes. Star party scheduling</p> <p>Contact Director Tom Reiland at 412-487-8326</p>	<p>Access/training on Mingo observatory site, building. Star party and planetarium scheduling</p> <p>Contact Director Mike Meteney at 724-348-9087</p>	<p>Need Mingo Observatory telescope help?</p> <p>Contact Help Facilitator Gene Leis at 412-310-2504</p>	<p>Mingo Observatory loaner telescope: 8" Orion Dobsonian</p> <p>Contact Director Mike Meteney at 724-348-9087</p>
<p>Business Meeting Guest Speakers, Presentations</p> <p>Contact Vice President Terry Trees at <a href="mailto:vicepresident@3ap.org">vicepresident@3ap.org</a></p>	<p>Submitting Guide Star articles, images, corrections</p> <p>Contact Eric Fischer at: <a href="mailto:gseditor@3ap.org">gseditor@3ap.org</a></p>	<p>Night Sky Network</p> <p>Contact Kathy DeSantis at <a href="mailto:desantisk@aol.com">desantisk@aol.com</a></p>	<p>AAAP Merchandise (Calendars, books, etc.)</p> <p>Contact Merchandise Coordinator Mark Arelt at <a href="mailto:diapsida@verizon.net">diapsida@verizon.net</a></p>

## Ken Kobus' Lecture Series: "The Birth, Life and Death of Stars – A Layman's Perspective"

(Continued from front page)

The course is four weeks long, lasting 1-1/2 hours per night. If the night is clear afterwards we will open up Mingo observatory to view the splendors of night sky for those that choose to stay. Class begins on **April 8, 2014** and lasts for four consecutive Tuesdays (**April 8, 15, 22 and 29**).



All lectures start at **7:30 PM** and run until **9:00 PM**. All AAAP members, as well as members of the general public are welcome to attend. There is no charge.

## Classifieds

**Seeking A Good Home:** 60 mm, 700 mm focal length refractor with eyepieces, Barlows and prism diagonals. Originally owned by the late Dr. Truman P. Kohman, one of the benefactors of Wagman Observatory. Free, but donation to AAAP requested in light of the scope's owner. Contact Flacc Stifel at [fstifel@version.net](mailto:fstifel@version.net)

**Wanted – Back Issues of Observers Handbooks:** After straightening out my astronomy bookcase, I see I am missing my copies of both the 2009 and 2010 RASC Observers Handbooks. My set begins with 1996. I have no idea why I'd ever need them, but if you have a copy of either or both in good condition you wouldn't mind parting with, I'd like to buy it/them from you. Please contact me by phone at 724-337-3231 or by e-mail at [treest@comcast.net](mailto:treest@comcast.net)

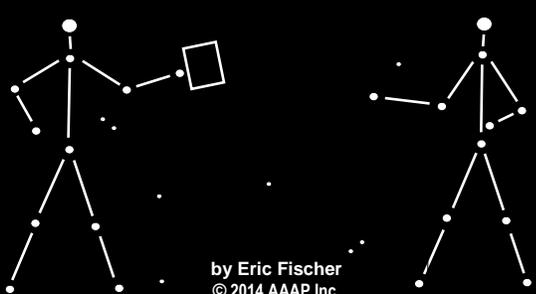
April, 2014						
SP = Star Party MM = Monthly Meeting		NEWO = Wagman Observatory CSC = Carnegie Science Center			MCPO = Mingo Observatory AO = Allegheny Observatory	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	31	1	2	3	4  Public SPs, NEWO and MCPO, start at Sunset. See front page.	5 Public SPs, NEWO and MCPO, start at Sunset. See front page.
6	7 	8 Ken Kobus Lecture at MCPO. See front page.	9	10	11  MM at CSC, starts at 7: 30 pm. See front page.	12 First man in space, Yuri Gagarin (1961)
13	14 Christian Huygens birthday (1629)	15  L-Eclipse SPs (AM). Ken Kobus Lecture. See front page for both.	16	17	18	19 
20	21 Lyrid Meteors peak.	22  Ken Kobus Lecture at MCPO. See front page.	23	24 Hubble Space Telescope launched (1990)	25	26 
27	28 Wagman Phase II dedication (1994)	29  Ken Kobus Lecture at MCPO. See front page.	30 AAAP Co-Founder Leo Scanlon's birthday (1903)	1	2	

May Look-Aheads		April, 2014 Sunrise/Sunset Times (R = Rise, S = Set)												
<u>May 2:</u> Public star parties at Wagman and Mingo				R: 7:02 am S: 7:44 pm	1	R: 7:00 am S: 7:45 pm	2	R: 6:59 am S: 7:46 pm	3	R: 6:57 am S: 7:47 pm	4	R: 6:56 am S: 7:48 pm	5	
<u>May 9:</u> AAAP meeting (including officers election) at CSC.	R: 6:54 am S: 7:50 pm	6	R: 6:52 am S: 7:51 pm	7	R: 6:51 am S: 7:52 pm	8	R: 6:49 am S: 7:53 pm	9	R: 6:48 am S: 7:54 pm	10	R: 6:46 am S: 7:55 pm	11	R: 6:45 am S: 7:56 pm	12
<u>May 24:</u> Possible meteor storm? See S&T magazine.	R: 6:43 am S: 7:57 pm	13	R: 6:42 am S: 7:58 pm	14	R: 6:40 am S: 7:59 pm	15	R: 6:39 am S: 8:00 pm	16	R: 6:37 am S: 8:01 pm	17	R: 6:36 am S: 8:02 pm	18	R: 6:34 am S: 8:03 pm	19
	R: 6:33 am S: 8:04 pm	20	R: 6:31 am S: 8:05 pm	21	R: 6:30 am S: 8:06 pm	22	R: 6:28 am S: 8:07 pm	23	R: 6:27 am S: 8:08 pm	24	R: 6:26 am S: 8:09 pm	25	R: 6:24 am S: 8:10 pm	26
	R: 6:23 am S: 8:11 pm	27	R: 6:22 am S: 8:12 pm	28	R: 6:20 am S: 8:13 pm	29	R: 6:19 am S: 8:14 pm	30						

**Astronomy and Astrophysics Humor with "The Zubens"**

"Ellie, I bought that book you wanted on Jupiter's Galilean satellites."

"Thanks Essie! How much do *lo* you?"



by Eric Fischer  
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### A Related "Welcome" to These Newest AAAP Members

Make sure to extend a hand to these latest AAAP inductees at a future meeting or star party:

- |                  |                  |
|------------------|------------------|
| Primo Sarno      | Rich Childs      |
| Mark C. Hamilton | Sally Swieck     |
| Donald Querry    | Jeff Weissert    |
| Brandon Creech   | Thomas P. Mahady |

