

PAStimes

Phoenix Astronomical Society
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PHOENIX ASTRONOMICAL SOCIETY — ESTABLISHED 1948

Veronica Ann Zabala-Aliberto To be September Third Speaker

Veronica Ann is currently a senior undergraduate student within the School of Earth and Space Exploration at Arizona State University. She recently was assigned to work on the Lunar Reconnaissance Orbiter mission that launched in June 2009. She has been involved with the calibration of the LRO Narrow Angle Camera, research in planetary geology as well as creating education outreach materials for educators, students and members of the general public related to the mission. For further information about Veronica Ann or if you would like to contact her, please visit <http://www.veronicazabala.com>

Lecture Topic

Her lecture, entitled "We have gone back to the Moon!" will cover the instrumentation of the Lunar Reconnaissance Orbiter (LRO) focusing on the LRO's cameras and the spectacular images coming from those cameras to date. The lecture will also cover topics on education outreach, future lunar missions and how the general public can be more involved in LRO's mission and future lunar missions. Free educational outreach materials will be available for all participants. For further information on the LRO mission please visit <http://lro.gsfc.nasa.gov>



May 7, 2009 PAS Meeting Review

By Terri, Event Coordinator

Link to meeting photos:
<http://www.pasaz.org/forums/gallery.php>

The May PAS meeting was very interesting. We had Rod & William sick. They didn't attend. I almost didn't attend due to a massive migraine. I wish to thank everyone for helping out a little once they knew I had a migraine. It really was appreciated.

The meeting started with me running around selling 50/50 raffle tickets & passing out silent voting pages. Then we opened the meeting with a few topics that needed to be discussed. The sign I had posted on the podium gave the agenda for the night.

Several PAS members picked up their newly made Name Badges. Those of you who did not, please be sure to see me at a future meeting (PAS or MOM's) to get those. I do not usually carry extra name badges to Star Parties.

Along with the 50/50 raffle and the silent voting, I also handed out some International Year of astronomy pins. Several

people on the list to receive one were not present. Do not worry, I have plenty left, so get that from me at a future meeting. Also, once we log our next NSN event, we can ask for 250 more for handing out to the public. So, we need a star party to happen successfully, without cloud cover. Blow away the clouds! :)

Two 2008 Year in Space Calendars were available for a donation to PAS. So, I'd like to thank John for taking one of them and making a donation and Tim for doing the same. It is appreciated and the donation is welcome. I hope the calendars are enjoyed! Should you like them enough to order the 2010 version, be sure to drop me an email around September when we will be ordering next year's calendar.

The 50/50 raffle was won by Steve Palmer. Thank you all for participating. \$32 was collected and so \$16 went to Steve and the other \$16 went to PAS.

Mike gave a brief Treasury report for which a review of that report is in this issue

of the newsletter.

Then there were the elections. Yes, for some reason, current officers think that if they do not attend the meeting, they won't be re-elected. However, we did it the short way this time. It was suggested that we ask the current officers if they mind running for office again this year. If none of them wished to drop from office, we did a vote into office as a mass vote. Meaning: "All in favor of the current officers being re-elected." And so the list of officers for the 2009/2010 season is the same as this year's. The new person to the list is Elaine, who was voted in as Hostess. CONGRATULATIONS ELAINE!

Speaking of Hostess/Host, I wish to thank Steve Palmer for making the rounds to get everyone to sign in at the meeting. That was absolutely very helpful and appreciated. John Pulis didn't make it to the meeting, and neither did Elaine.

Then we did the vote on whether to purchase the program to give us the oppor-

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Meeting of the Minds May 28 Review

By Terri, Event Coordinator

A few topics were on the list, but the main topic was the new ACP Software that Chris purchased by vote of PAS, for the club. Let's review the topics very briefly.

We talked about the Listserve idea. Chris explained that a listserv is a pain to run and create, thus, if you want to get notices of events that PAS is hosting, without having to go into the website, the forums, or any other place to look it up, other than your email, then go to the PAS Forums. Go to the News & Announcement area, and sign up to get email notices from when they are posted, about upcoming events, happening or canceled. If enough PAS Members are signed up on that forum, I can quit emailing out notices to the PAS group through my email. Sign up today. Here's the link: <http://www.pasaz.org/forums/forumdisplay.php?f=10>. At the top right of this forum,

and several others in the PAS website, you can go to Forum Tools, and then down to Subscribe to this Forum, or Thread. I suggest you subscribe that forum so that you get the notices by email.

Another topic we talked about was the super awesome Moon gazing party Rod is putting together on Oct eight at PVCC by the telescope domes. I will get that posted on the site shortly. Here's a link with some info about Crashing into the Moon, for which we will provide a star party to view the after effects of the crash: <http://www.portaltotheuniverse.org/blogs/posts/view/12340/>.

We also talked about the upcoming 6/4 star party at PVCC, for which many volunteers were needed to cover those who could not be there (Mike, Terri, Don).

Then we turned it over to Chris, who had set up laptops for every two people at

the meeting. We then played with the new software, in a simulator program. Chris assigned us all log in names and passwords so we could try out the new program. It was an awesome meeting. Chris is a great teacher of computers and how to use them. He does a great job of entertaining us when the computer isn't cooperating. Thanks Chris for an awesome demonstration. I wish more PAS members could have attended. And many many thanks goes to Dave for keeping the room open that night until 10:30 so we could finish our discussion. Watch for notices on classes for how to use the software, how to take astrophotos, and more, so that we can start learning to use this software for some awesome Virtual Star Parties. Photos for this event are on line in the Photo Gallery of the PAS website. Enjoy!

Mike Will Be Doing One More Lecture

Date: Saturday September 5, 2009 Location: Mike's home in Carefree Time: Start time will be 1pm

RSVP is suggested with Mike at 480-488-3031, before noon day of event More details can be found in the PAS calendar on line at:

<http://www.pasaz.org/forums/calendar.php?do=getinfo&e=168&day=2009-9-5>. See you there! ***

Private Star Party Review

By Terri, Event Coordinator

With the assistance of Rod & Sue, William & Terri turned the Matlock Star Party into one very successful evening. It started with a question of if it was going to happen on May 30th or not. It's a 60th Birthday! The party was about 25 people. There was food, & fun all through the evening. We set up about 7:30pm. Didn't know what to expect. Didn't know these were a very awesome group of people!!! Wow, I'd love to do more star parties for them, or

people like them. Very nice, friendly, awesome people. The party was in Mesa, and Rod and I found it rather easy to get to.

We set up, dealt with some cloud cover, got some clearing, showed a lot of objects, talked about scopes, star charts and computer programs for doing astronomy. This group really had an interest in what we were showing them. We agreed to end the party around 9pm but since the clouds were being a bit difficult, we stayed a little longer once the clouds cleared.

Many thanks goes to Jenny for hosting an awesome party! I do hope her husbands' 60th birthday was his best ever! He told us that this was the third birthday party he'd had this week. Turning 60 has its advantages. More parties!!!

Jenny writes: Terri, thanks so much for a wonderful party. My granddaughter, son and son-in-law are still in the stars over it.

May 7, 2009 PAS Meeting Review

Continued from page 1

tunity to be the only club with a Remote controlled telescope for astrophotography. In the May issue we put a huge article explaining what the program could do and how it would benefit the club. The vote was YES and as of 5/14, the program was purchased. The PAS membership will soon have a section in the PAS forums on line that will explain what we are doing with the program, and how you can be involved, and answer your questions as we go along. Feel free to read up about it, and then sign up to have some fun with us. Chris took the floor and talked about this program for about ten minutes. Then we voted.

Then, we turned the night over to Mike and his topic "Quantum Springs" was very well presented. In fact, many people enjoyed it so much they emailed him, saying how well he presented it and how it made so much sense. I do hope everyone attending enjoyed it as much as the rest of us did. Thank you Mike!

After Mike was done, we did the 50/50 raffle, and then awarded the pins for the Night Sky Network. The Night Sky Network awards PAS three pins to give to the three most active members in the club. They are really nice pins. So, we had a silent vote

on who everyone thought was the three most active members in PAS. Here are the results: Bruce (1), Chet (3), Chris (4), John (2), Mike (8), Rod (3), Sam (1), Steve (3), and Terri (6). The three winners became Chris, Mike and Terri. Congratulations!!! So, work really hard in 2009 to earn those pins for next year. We are counting on you!

Thank you all for the snacks. Snacks make the meeting go by smoother. I believe snacks are a great way to keep everyone awake for the presentations as well as keeping their minds focused on the presenter. Thanks to Ed for all the many snacks, and Sam for the popcorn, and Bob for his cookies for which I brought to the meeting again. And anyone else who brought some. Also, thank you to those who donated to the snack fund. Everyone appreciates good snacks at the meetings.

Let's see everyone at the September meeting. We have an awesome speaker lined up. You can visit the Speaker Line up document on line at: <http://www.pasaz.org/forums/downloads.php?do=file&id=8> to see what awesome topics and speakers we have lined up for your enjoyment. Have a super Summer. Watch for the July issue of PAStimes to come out with an update of upcoming events. ***



Mike's Lecture Series & Birthday Party May 23 Review

By Terri, Event Coordinator

It started out as a cloudy day. Thus, we thought the star party portion of Mike's Star Party/Lecture Series event might be canceled. So, when everyone arrived, we realized we had no telescopes for viewing. But not all is lost! When with Mike, the fun continues.

It began with Mike, Sam & Frank going to the museum in town. Since I didn't attend that part of the day's events, I don't know which museum, but they sounded like they had an awesome time.

Then John, Kevin, William & I met the group at Bad Donkey. I suggested it would be easier to have everyone buy their own food rather than try to split a pizza that was ordered. It was an awesome party. Chris bought the cupcakes. They were good. Mike got a few cool presents. We enjoyed our food. Then we drove back to Mike's house for his lecture.

So, we get back around 6pm and I mentioned to everyone that I wanted to catch the sunset. We have been having

storms lately and the clouds should make a great sunset. So, I kept my eye on the setting sun from within the house while Mike set up for his lecture. He started the lecture around 7pm, a little later than planned, but the sun wasn't down yet. Around 7:30, several of us got up and left the lecture for a moment to go catch the setting sun. We were out there longer than I had planned, thus I felt I was missing a great portion of the lecture, but I found out later that Mike had postponed the lecture until our return, since most of his audience was out enjoying the sunset. So, after several of us took our photos, we returned to the house. By then, it was decided to end the lecture and watch really bad horror movies, old ones. I suggested we vote... should we continue the lecture or watch the movies. I was out numbered & the group chose movies. So, we watch the first one - something about attacking Leeches... that was terrible. It was done in the 50's. The best part was John Pulis's comment that he was going to have nightmares and wanted someone to hold his hand because of how afraid he was. That

was great! Thanks John, you livened up the party. Then we moved to a second one done in '58. It was something about a Screaming Skull. I liked this one more. It was a bit scarier, but just as bad on the acting, but it had more of a story to it. If it was back in '58 when we were watching it for the first time, it could have caused nightmares. However, movies these days are tons scarier. So, we enjoyed the second movie. Then the group moved out to the kitchen for a snack, drink, a chatting while we were actually trying to say good bye for the night. That took about 45 minutes to get out of the house. It was an enjoyable party. The food at Bad Donkey was tremendous, as usual. Mike is an awesome host, & I wish him an awesome 55th birthday! Watch in the calendar on the website for future events at Mike's. He has a historic house with all sorts of cool things to learn about while visiting. Plus, Mike can entertain on any subject, if given the chance. Thanks for the invite Mike. Happy Birthday! Photos from this event are on line in the Photo Gallery on the PAS website. Enjoy! ***

Year in Space Calendar

Deadline for orders: Nov PAS Meeting
By Terri, Event Coordinator

It's that time of year again. I know, it's hot outside and the last thing you want to be thinking of is Christmas presents or a gift for the PAS Social, but we have to get the order in for the calendars if everyone ordering is going to receive them prior to needing them as Christmas presents. So, here is my

request for ordering your calendar. Make sure I know you are planning to purchase a 2010 Year in Space calendar, and get the money to me for it by the November PAS meeting. I put the order in shortly after that meeting, so that at the December PAS meeting, or the November Meeting of the Minds, I can deliver them to you. The rate so far, each year has been \$10/calendar. That is

because we have been very lucky to have ten calendars ordered. If you want a calendar, let me know ASAP. Check out the new images in this year's calendar at YearInSpace.com. Ten + calendars are again \$10 each this year. Help us reach our goal. It is a calendar worth having if you love astronomy, or know someone who does & would appreciate this calendar. Order Today. ***

Many Many Thanks to Dave Hellman!!!

By Terri

At the PAS Meeting of the Minds for May 28th, Dave put up with many laptops invading his classroom. He also had a

crowd of people using them during Chris's presentation on the ADP Software for our Virtual Star Parties. And to top it off, he also had to stay till 10:30 for us to finish our

meeting! Dave, you are wonderful to stay so late. Thank you so much for allowing us the use of G-147 for our business meetings. ***

Photo Moving

By Terri, Event Coordinator

Over the next several months, when I have the time to do it, I will be moving the PAS Photos off my Photobucket account & onto the PAS website, as requested by Chris (Webmaster). The photos will be all the

same, & in the same order. I just wanted to let you know that the links on the PAS Digest Blog, will no longer work once those albums have been removed. The reason I am doing this is that I need my photobucket for personal photos, & by putting all the

PAS photos in one place, we can enjoy them better. So, if you go to a broken link, don't fret... just visit the PAS website & go into the Photo Gallery right there. Enjoy! ***

Review OF 7/18 (It Was a Birthday Party)

By Terri, Event Coordinator

It all started with a birthday party for Don. William, Don, & Terri went to Sam's Club to pick up the cake. Don's birthday was this day 7/18. Took cake up to Bad Donkey in Carefree. Arrived before anyone else. So, called Mike to find out where he was. Mike, Frank & Sam joined us at Bad Donkey. We ordered food. Then Bob showed up. The party was getting bigger and more fun. Then Judy came. When all had eaten, we split up the cake. It was good cake. HAPPY BIRTHDAY DON!

We then moved the party to Mikes' home. We had a good time doing several things. Mike was showing off his recent acquisition of meteorites. We got to see his

new van. Sam set up for Solar Viewing, and then Sandra came to join the party. Judy, Sandra, me & Don enjoyed a nice view of prominences. Then, it started getting dark, so we took a group picture, as suggested by John. That's when Kevin showed up with John. And before long, Greg was there as well. It got darker, and Sandra left as not to drive home in the dark.

The clouds took over the sky, so Sam packed up his scope. Mike started but never finished his lecture. As we listened, someone asked a question, that sent Mike on a tangent, but these were good tangents, lasting 1/2 hour to an hour each time. We had started the lecture about 7pm, it was now 10:30pm and Mike hadn't gotten past the

first couple slides. So, Mike gave up trying to give the lecture, and we all had more cake and snacks. Then, Frank wanted to watch a movie he had brought with him for this evening to share. It was called "Religulous." Very interesting, strange movie. Afterward, several of us left as it was now around 2am. It was a great party. I hope Don had a memorable Birthday. To see photos of this event, visit the Photo Gallery on www.pasaz.org. I took over 230 photos, but posted only 140 of them to the site. Don will get the entire set of photos as a birthday present from us, on a DVD later in the week. Thanks to everyone who joined in the fun and put up with the many photographic opportunities I was able to capture. Enjoy! ***

Meeting of the Minds Review 7/30

by Terri, Event Coordinator

It was a very informative meeting. At this particular PAS MOMs, Rod and I turned the meeting over to Chris who took us through the process of choosing an object to photograph at the Virtual Star Party. If you missed this class, you may wish to try to get in on the next scheduled class or attend the next Virtual Star Party (VSP) to learn how to be involved in the NEWEST addition to being a PAS member. Chris

demonstrated what we have to do to prepare for the star parties prior to attending the event. The first VSP is scheduled for Aug 14th. By the time you read this, the event will have happened & a review of that event will most likely be in this issue for your reading enjoyment. It was decided at this MOMs how we are going to hold these star parties & what is involved, and what is expected. They are PARTIES, after

all. Come have some fun with us even if you aren't doing any photography that night. To find out more about these events, please visit the Forum Thread where the discussion begins and questions are answered at:

<http://www.pasaz.org/forums/showthread.php?t=322>. We hope to see a lot of PAS members enjoying this new feature of PAS. ***

PAS Meeting of the Minds Agenda for 8/27

Meet in G-147 PVCC 7pm - 10pm - as of 8/21

Send topics to Terri at Events@pasaz.org

This month's Agenda will cover these topics (links provide more info - Person listed submitted & possibly will talk about this topic):

* PAS Post Card Project - discussion, possibly make phone calls? Divide up list,

currently 29 on list, should call & maybe mail before Christmas. Project start date should be in Oct.

* Tim: Membership Drive Ideas

* Bob: Astronomy Mag subscriptions through the club

* Public Star Party Location: BCC, PV Park, NMP

* Scheduling 2010 & 2011 Events -

Help create some

* Halloween Star Party 2009 - Fri or Sat night?

* Matt: PAS need a Facebook page? See forum discussion

* Location for Telescope Workshops - pin down location prior to Dec

* Chris: Virtual Star Party - Planning next event ***

Upcoming September PAS Events

By Terri, Event Coordinator

We start off this PAS Year with an awesome line up of Guest Speaker for the Fall Semester. Please see list of Guest Speakers within this issue.

9/3 PAS Meeting: 7pm to 9:30pm in the PVCC Library. Everyone is welcome. Bring a friend!

9/5: Mike's Astrophysical Lecture Series: Mike will be hosting another Lecture at his home in Carefree. PAS members are welcome, RSVP is requested. Start time is 1pm. More details will be announced at the Sept meeting. Public can RSVP with Mike by day before by phone, email or on the PAS Calendar on line.

9/10: PVCC Star Party: 5:30pm to 10pm by the Telescope Domes. Weather permitting. RSVP is with Rod. In case the

monsoons have not blown away, please RSVP your attendance. RSVP by phone, email or on the PAS Calendar, on line.

9/15: ASU West Open House: Paul hosts this star party in the Fall Semester. It is an Open House in which everyone is invited. There are telescopes set up for the public to view the night sky, as well as various displays around the campus to be viewed. RSVP is with Paul. It isn't a PAS Event, but PAS helps at this event. If you can assist, or want to attend, be sure to RSVP with Paul. More info can be found in this flier created by Paul: <http://www.west.asu.edu/atpcs/Telesc...gO fJupiter.jpg>

9/24: PAS Meeting of the Minds: The MOM's is the Business portion of PAS. PAS does not like to use its General meeting time to hold business meetings, but

instead, we hold the business meetings one week prior to the next General PAS Meeting. At these meetings, we discuss the topics gathered in this document: <http://www.pasaz.org/forums/downloads.php?do=file&id=60> The meeting is open to anyone, however, we ask that children are not permitted. Come share your ideas with the People of PAS who care about the club. We meet in G-147 from 7pm to 10pm.

10/1: PAS Meeting: The October PAS meeting will have an awesome Guest Speaker. Please see article in this issue that gives you all the details of the Upcoming Guest Speakers. 7pm to 9:30pm PVCC Library.

10/2: Temple Beth: Private, PAS Members only, star party. RSVP with Terri for attendance or on PAS Calendar. ***

New This PAS Season

By Terri, Event Coordinator

Last year at this time, I announced the new addition of the January PAS meeting. Again this year we will continue that feature. But this year, we have the VIRTUAL STAR PARTIES! Yes, you, too, can take

awesome ASTROPHOTOS as a PAS member. Read all about it in the PAS Forums at this [link: http://www.pasaz.org/forums/showthread.php?t=322](http://www.pasaz.org/forums/showthread.php?t=322) PAS is working hard to give its members unique, fun events that everyone

can enjoy. We'd love to see you join in the fun at the VSP's. RSVP your attendance today! Dates for these events will be posted in the PAS Calendar on line as well as in this newsletter. Watch for them. We will see you there!!! ***

PAS Expense Report

Provided in brief at the May PAS meeting, given to Terri by Mike in a hard copy, to make into a report for the newsletter. This is the expenses for April 2008 to 2009.

Expenses: (to nearest dollar)

Astronomical League \$185, Insurance \$320, Gas Disbursements (Checks going out to PAS volunteers based on income donated to PAS for star parties such as the

one we did in Mayer) \$260, AZ Corp Comm. \$10, Star Party disbursements (a Star Party pays PAS, and those who volunteer, get some of the money - PAStimes Star Tours) \$550, Speaker fees \$50, Stamps for outgoing newsletter, & this year, postcards \$39.50, and PAS Badges (the fee we pay to have them made for you) \$119.13. Total: \$1,543.47

Income:

Membership dues \$695, Donations \$170, Gas reimbursements \$260, Badges & T-shirt sales \$245, Paid star parties \$605. Total: \$1975.00

Bank statement for Apr 2009 reads balance of \$11,999.57

Report done by Mike on 4/28/09 ***



Arizona Sky

By Leah Sapir

September is the first month of autumn, but in the sky the summer triangle is still high overhead. Deneb, the tail of Cygnus the swan, is almost directly at the zenith, with Vega to its west in Lyra the harp, and Altair towards the south in Aquila the eagle.

The swan is flying along the Milky Way, hiding amazing treasures in its wings.

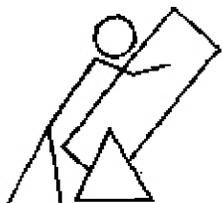
Alberio, the swan's head, is a bit east of a line joining Vega and Altair; while three stars in a row, just west of Deneb, form the swan's wings: Sadr (Gamma Cygni) in the middle, flanked by Delta and Epsilon Cygni. Sometimes we can see the fainter stars Zeta Cygni (towards the south, near Epsilon) and Kappa and Iota Cygni (towards the north, near Delta).

Under the swan's north wing, between Deneb and Delta Cygni, is Omicron Cygni, a pair of orange giants. The two are actually just an optical grouping rather than a multiple star. Omicron-1 is about 1350 light years away, and Omicron-2 is about 1100 light years from us. In binoculars or a small telescope we can see a third optical companion: 30 Cygni, a white giant 700 light years away. Although two of these stars are actually orange, the grouping is sometimes known as "the red, white, and blue cluster" due to its visual appearance.

In this area we can also find two charming open clusters. M29, about 4000 light years away, is near Sadr, and M39, about 900 light years away, is about nine degrees east of Deneb. Both clusters are about ten light years across.

M29 is composed of very young stars, only a few million years old. Professional studies indicate that some of its stars might even still have a circumstellar disk, where planets could be forming. M39's stars have been around a bit longer, around 300 million years.

M39 was apparently seen in 325 BCE by Aristotle, who described it as resembling a comet. He must have



had very dark skies to be able to see it without a telescope!

If you like to play hide-and-peek, you might want to check out NGC 6826, also known as "the Blinking Planetary". You can find it near the northern wing of Cygnus, about $\frac{3}{4}$ of the way from Omicron to Iota Cygni.

Through a telescope we can see a bright central star (brighter than the central star of most planetaries) surrounded by a very faint nebula. This combination creates a "now-you-see-it, now-you-don't" effect when viewing the nebula using averted vision.

As usual, a photo shows more detail. The nebula is a light blue oval with bright spots at the sides. These bright spots are called "FLIERS" – "fast, low-ionization emission regions". Their significance in planetary nebulae has not yet been determined, but apparently they were ejected



Blinking Nebula



North American and Pelican nebula

from the central star before the rest of the nebula.

NGC 6826 is about 3000 light years away, and less than $\frac{1}{2}$ light year in diameter.

Near Deneb is a faint emissions nebula that has become famous for its shape – the North America Nebula, NGC 7000, that actually resembles a map of North America! Strategically-placed open clusters mark the east and west coasts: NGC 6996 in "Boston" and Collinder 428 in "Seattle".

Directly to the east of NGC 7000 is the Pelican Nebula, IC 5070, whose shape resembles a bird with a very large beak.

Both nebulae are very wide: the North America Nebula is about two degrees across, and the Pelican is a little more than one degree. Both require dark skies and a telescope to be seen, but the lowest power must be used to enable a wide field. The brightest parts of these nebulae can sometimes be seen in binoculars, if the sky is dark enough. Photographs show the complete shape and red color.

Both nebulae are part of a massive cloud of hydrogen where new stars are being born. The young stars produce ultraviolet light that ionizes the hydrogen atoms and makes them glow. However, the visible part is only about $\frac{1}{10}$ of the whole cloud. The shapes that we see are created by the dark parts of the hydrogen cloud, that hides parts of the illuminated area.

In the picture we can see the North America Nebula on the left and the Pelican on the right, separated by dark nebula Lynds 935. The bright nebulosity at the bottom of the picture, south of the Pelican, is IC 5068. The bright star at the top right is Deneb; the one at the left, off the "west coast" of the North America Nebula, is Xi Cygni, an orange supergiant. The nebulae are about 2000 light years away – making Xi Cygni, at 1200 light years, a foreground star, and Deneb, at 3000 light years, a distant background star. Deneb is about 200,000 times as luminous as the sun, and about 70 times as luminous as Xi Cygni.

Meanwhile, back in the solar system, Jupiter, Neptune, and Uranus are at opposition. They can be seen in the southeast after sunset, and are up for most of the night. Jupiter is easily visi-

Arizona Sky

ble with the naked eye, while Uranus and Neptune require a telescope, or at least binoculars.

Mars is a morning star, but starting to rise earlier – around 1 am at the beginning of September, and midnight towards the end of the month. In coming months it will be moving into our evening skies.

Venus is also a morning star, rising close to dawn – about 3 am at the beginning of September, and 4 am at the end of the month. But unlike Mars, which will continue to rise earlier, Venus will soon be fading into the sunrise. After that it won't be easily visible till it becomes an evening star again in the spring. So, catch the opportunity to view Venus while you can!

Mercury is too close to the sun to be easily visible for most of the month. It begins the month as an evening star, switching to the morning sky towards the end of the month, when it will rise in twilight about an hour before sunrise. It will be more visible in October.

Saturn's rings are now at their thinnest, but we won't be able to see them this month because Saturn is too close to the sun. Towards the end of the month, we might get a glimpse of Saturn before dawn. As with Mercury, the viewing will be better in October.

The full moon will be close to Jupiter and Neptune all night on September 1-2

and 2-3. The third-quarter moon will pass close to the Pleiades on September 10, from midnight to dawn; and on the following night, the moon will be between the Pleiades and Hyades. On September 13 the moon will pass close to Mars.

The crescent moon will be close to M44, the Beehive Cluster, in the east before sunrise on September 15; and on the following night the crescent will be close to Venus. On September 23 we'll see the crescent moon in the west after sunset, near Antares.

Join us next month when we continue to explore the summer and autumn constellations. And till then – wishing you clear skies, and happy observing!

Virtual Star Parties (VSP)

By Terri, Event Coordinator
The only link you need:

<http://www.pasaz.org/forums/showthread.php?t=322>

At the Meeting of the Minds on 8/30/09, it was decided that we would do the star parties this way. Currently, during the summer months, the window in which photographs can be taken and not interrupted by Sunrise or Sunset, is after 9pm. So, we are starting our star party at 9pm.

A Virtual Star Party is a PARTY. It is a gathering of PAS Members who wish to learn about, work with, and do astrophotography through Chris's 2 telescopes in Mayer, AZ, remotely. The way this works is: A PAS member does the research to find an appropriate object that will photograph well, fit within the parameters of Chris's CCD chip, and writes up and submits the photography plan to the forum thread mentioned above. They then find out if they are approved or not. If approved, WE HAVE A PARTY! Because the telescopes are in Mayer, the weather needs to be monitored. These star parties can be canceled due to weather in Mayer that may not be affecting Phoenix.

Any PAS member who learns how to use the software, at one of our classes, can schedule time at these events.

This is a party. Bring one snack and one drink to share. If each person attending brings one of each, there will be enough to go around. And the host of the party doesn't have to feel obligated to provide for everyone. It is suggested that you attend this

event even if you are not the one doing the astrophotography that evening. Learn how to do it better by attending and learning during the evening.

How do we choose who goes first? In the Virtual Star Party Forum Thread (see link at top of article *Editor note*), those who are interested in doing the Virtual Star Party photography session, will submit their object of choice. He/She who submits their choice first, and gets approved, gets to do it at that session. So, let's say your object is available from 9pm to 11pm at the Zenith. And you submit your plan before someone else, you will get to do yours that night.

How do you pick an object? Chris ran a class at the Meeting of the Minds on 7/30 about this topic. If you missed the class, you may wish to attend this First Virtual Star Party (VSP) to learn more about choosing an appropriate target and setting it up for photography.

What are the time constraints? We are hoping to include 3 objects per VSP. The time frames are 9pm to 11pm, 11pm to 1am, 1am to 3am (if needed). Your object must be closest to the Zenith around those times to get the best images.

What will others be doing while the chosen object is being rendered? Chris said we can bring our laptops and or use his and learn more about how to work the programs. Or, Chris has a Wii, for those who want to play during the party. Or, we could bring DVD's to share. Socializing is a good back up plan as we all like to talk.

So, how do you get involved? As a

PAS Member,

- 1) you pick an object based on the info provided at the 7/30 MOMs.
- 2) You submit your photography plan in this forum thread.
- 3) You get approved and then meet at the designated location for that evening's VSP.

You enjoy the evening and go home with some images that will later be used to make a final, awesome image. You take those images you've collected, and attend one of Chris's Image Editing classes (dates, locations, times, TBA). It's great fun. Start setting up your plan now and post them today! Next Class will be on WRITING PLANS and is TBA.

We are seeking volunteers to host these events at their homes. The summer time has us starting at 9pm and ending up to 6 hours later, allowing for 3 people to photograph their objects in one VSP session. If you'd like to host the party, please let Terri know.

What does the host do? Provide a location to have the party. The party attendees will each bring a snack and drink to share. If extra chairs are needed, please inform Terri so arrangements can be made to have enough chairs for everyone attending.

We hope to have 2 VSP's per month, one during the weekend closest to the 1st Quarter Moon and the other around the 3rd Quarter Moon. The events will be mostly on Saturday evenings, but can move to Friday if it is requested by the host. We hope to see you there!!! ***



A Planet Named Easterbunny?

You know Uranus, Neptune, and Pluto. But how about their smaller cousins Eris, Ceres, Orcus, and Makemake? How about Easterbunny?

These are all names given to relatively large “planet-like” objects recently found in the outer reaches of our solar system. Some were just temporary nicknames, others are now official and permanent. Each has an unique story. “The names we chose are important,” says Caltech astronomer Mike Brown, who had a hand in many of the discoveries. “These objects are a part of our solar system; they’re in our neighborhood. We ‘gravitate’ to them more if they have real names, instead of technical names like 2003 UB313.” Nearby planets such as Venus and Mars have been known since antiquity and were named by the ancient Romans after their gods. In modern times, though, who gets to name newly discovered dwarf planets and other important solar-system bodies? In short, whoever finds it names it. For example, a few days after Easter 2005, Brown and his colleagues discovered a bright dwarf planet orbiting in the Kuiper belt. The team’s informal nickname for this new object quickly be-

came Easterbunny.

However, ever since its formation in 1919, the International Astronomical Union (IAU) ultimately decides whether to accept or reject the name suggested by an object’s discoverers. “Easterbunny” probably wouldn’t be approved.

According to IAU guidelines, comets are named after whoever discovered them—such as comet Hale-Bopp, named after its discoverers Alan Hale and Thomas Bopp. Asteroids can be named almost anything. IAU rules state that objects in the Kuiper belt should be given mythological names related to creation.

So Brown’s team started brainstorming. They considered several Easter-esque names: Eostre, the pagan mythological figure that may be Easter’s namesake; Manabozho, the Algonquin rabbit trickster god.

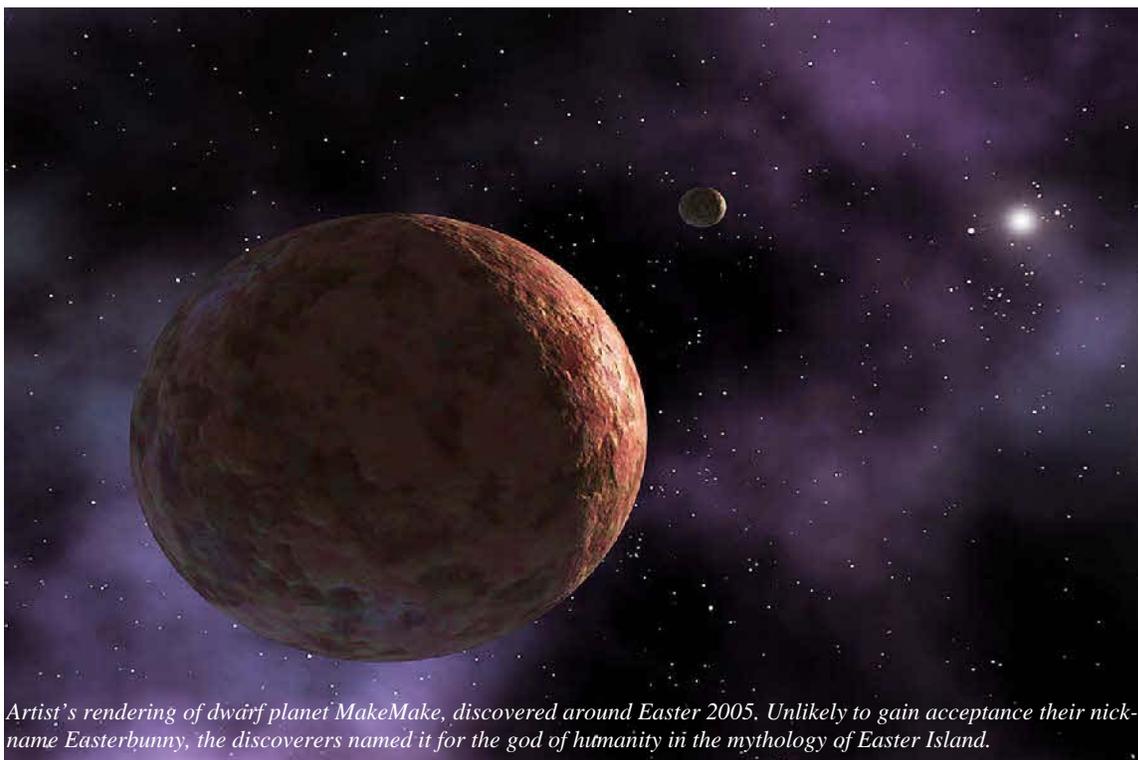
In the end, they settled on Makemake (pronounced MAH-kay MAH-kay), the creator of humanity in the mythology of Easter

Island, so named because Europeans first arrived there on Easter 1722. Other names have other rationales. The dwarf planet discovered in 2005 that triggered a fierce debate over Pluto’s status was named Eris, for the Greek goddess of strife and discord. Another dwarf planet with an orbit that mirrors Pluto’s was dubbed Orcus, a god in Etruscan mythology that, like Pluto, ruled the underworld.

Brown says he takes “this naming business” very seriously and probably spends too much time on it. “But I enjoy it.” More tales of discovery and naming may be found in Brown’s blog MikeBrownsPlanets.com.

Constellations have also been named after ancient gods, human figures, and animals. Kids can start to learn their constellations by making a Star Finder for this month at spaceplace.nasa.gov/en/kids/st6starfinder/st6starfinder.shtml. There you will also find a handy explanation of why astrology has no place in science.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



Artist’s rendering of dwarf planet MakeMake, discovered around Easter 2005. Unlikely to gain acceptance their nickname Easterbunny, the discoverers named it for the god of humanity in the mythology of Easter Island.

Introductory Astrophotography

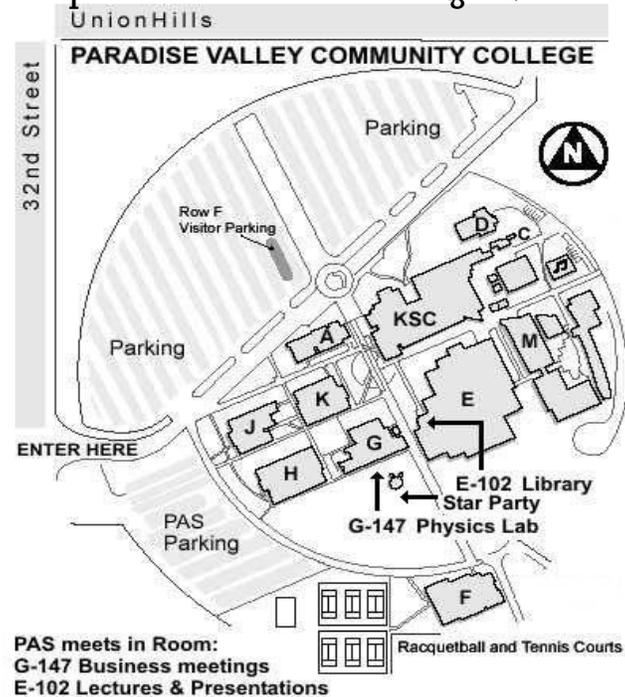
Friday-Sunday, March 19 – 21, 2010 4:00pm Friday-Sunday, November 12 – 14, 2010 4:00pm To be held at Kitt Peak.

These exciting 3-day workshops are intended for amateur astronomers ready to take the next step and plunge into the exciting world of astrophotography and image processing. We will cover everything from the history of photography itself to modern cameras, webcams, and CCD image processing. Avoid years of false-starts and costly mistakes as you learn how the pros create those stunning astrophotos seen in books and magazines. Meals and lodging provided. Reservations required. Robert Martino will be doing a 10 minute presentation about these classes at the Sept 3 PAS Meeting prior to the Guest Speaker.***

Map to PAS Meeting Location

Congratulations to Elaine

New PAS Hostess



I was asking Elaine, one of our newer PAS members, if she would like the position of PAS Hostess for the PAS meetings. On Mar 6, she accepted the position. Then, because of the PAS Constitution rules, we waited until the May PAS meeting & voted Elaine in as our new PAS HOSTESS. Many thanks & congratulations go to Elaine. Elaine will be seen at the meetings & events signing in the many attendees, greeting & welcoming everyone & being the awesome, fun lady she is. She will be a most awesome Hostess for PAS. Thank you Elaine! Elaine LeTarte & John Pulis (PAS Host) will work together to make everyone feel welcome at the PAS meetings. PAS is all about TEAM WORK! ***

Many Many Thanks to Chris

By Terri, Event Coordinator

I know how hard it is to get people of PAS involved in new & exciting stuff, especially during the summer months. I wish to thank Chris for hanging in there with the PAS crowd. He has done an exceptional job, gone out of his way with expense & time, to make his Mayer Observatory available for PAS Members to do Virtual Star Parties. Our first VSP didn't happen due to weather. We hope to schedule a bunch more of them at the next Meeting of the Minds (MOM's) so that PAS members can have a chance to

do this awesome, new Members ONLY event. Chris & I would like to see more participation in these events over the next several months. Come to the classes, learn how to do it, & then have fun having a Virtual Star Party with PAS. THANK YOU CHRIS!!! Without Chris, this new feature of PAS would not be possible. We will see you at the next VSP! Watch in the newsletter & the online calendar for dates, times, & locations of these awesome events. ***

Girl Scout Star Party, May 1st

By Bob Christ

An all-too-familiar recurring sky pattern this Fall '08/Winter/Spring '09 season again surfaced; "cloudis majoris." There wasn't even a hint of the 52% illuminated Moon visible. The telescope portion of the star party held at Camp Sombrero was canceled, but I was able to do the planned presentation about constellations and it was a fun time.

The sky did not deliver, but the Girl Scouts certainly did – about 75 of them plus another 10, or so, assistants were present as promised.

Early in the presentation I spoke of our early ancestor's amazement and wonder of the sky. It was the wonderment I focused on, and suggested that the science of astronomy began when our ancestors took the approach of: What is it, and how does it work? I also related the approach would serve them well throughout their lives, not just regarding astronomy.

Clearly the girls embraced the concept because the timed 30-minute presentation lasted well over an hour. The audience ranged from 4th graders to young women (I'm terrible at guessing age), and there

were numerous questions – ranging from the basic to those that were wonderfully insightful.

I distributed printouts of the [SkyMaps.com](http://www.SkyMaps.com) May sky chart to the girls and Sue Mitchell, an Executive Director of the Scouts, had printed-out planispheres for the girls to assemble the following day, Saturday.

There was a lot of interest in the sky shown, and it my fondest wish that at least one of the girls takes a continuing interest that could perhaps lead to a stellar discovery.

Ads in PAStimes

By Terri, Event Coordinator

A newer PAS member just emailed me asking if we had a place for members to post items for sale on our site, or anywhere. I wish to provide to you the answer I gave to him, such that PAS members will know how to get their items for sale, out to the public and the club.

1) PAS members have the ability, for free, to go to the PAS website and in the FOR SALE forum

<http://www.pasaz.org/forums/forumdisplay.php?f=5> post any astronomical related item for sale. The public can view these ads, but can not post their own or make changes to anything that is posted by a PAS member.

And should the public wish to advertise in the PAS Forums, for their items for sale (astronomy related only), they would need to send a donation of \$2+ and the ad to Terri, so that it can be put into the forums. The donation is made out to PAS. The ad stays posted until the item is sold or it is requested to be removed by its owner.

2) PAS Members can also, for free, post items for sale in the newsletter. Send those items, in a nicely, condensed ad, to Don for submission in the newsletter. Again, the public (non PAS members) can get their items into the newsletter, again by sending an ad with a check donation of \$2+ made out to PAS, to Don or Terri. This ad runs for one month only, however, remember that our newsletters are available for download on the site, and archived, so the ad can be considered to run indefinitely. For the next month's newsletter, a new donation would be needed to run the ad again.

Don Boyd
 PAsTimes Editor
 701 W. Del Rio St.
 Chandler AZ 85225

To:

PAS Speaker Line-up for Fall 2009

By Terri, Event Coordinator

- Sep 3: Veronica Zabala – Topic: "We have gone back to the Moon!" - <http://www.linkedin.com/in/veronicaannzabalaaliberto>
- Oct 1: Dan Heim – Topic: "Weightlessness" – <http://heimhenge.com>
- Nov 5: Dean Salman – Topic: "Remote Automated Observatories for CCD Imaging" - <http://ccdimages.com/default.aspx>
- Dec 3: Ken Herkenhoff - "CCD imaging from the Mars Exploration ***"

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What's Up For September?

By Rod Sutter, PAS President

Planets

Name	Date	Rise	Set
Mercury	09-1-09	08:08	19:44
Venus	09-1-09	03:29	17:16
Mars	09-1-09	00:55	15:12
Jupiter	09-1-09	17:54	04:30
Saturn	09-1-09	07:08	19:36
Uranus	09-1-09	19:34	07:52
Neptune	09-1-09	18:04	04:52
Pluto	09-1-09	14:33	00:58

All Times Arizona Time

September 15 2009

Sunrise: 06:12
Sunset: 18:33



Q1: August 27



Full: September 4



Q3: September 12



New: September 18