

PAStimes

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March Third Meeting To Be In G-147

Dennis Young will be coming all the way from Sedona to speak at the PAS March meeting. He plans to talk about space news and the future of space science, including some or all of the following:

- * A rare short video, title "Black Sky", about SpaceShipOne - the private manned spacecraft that rocketed to an altitude of 367,000 feet (almost 70 miles) in October 2004. SpaceShipOne repeated this feat twice within a 14-day period, breaking previous altitude records and winning a \$10 million award from the X Prize Foundation for its manufacturer, Scale Composites. The video includes rare footage showing the interior of the cockpit, as well as the Earth as seen from space. Dennis writes: "I was THERE! Well, on the ground at least, with 5000 other onlookers... A moment in history books!"

- * The future of space travel - videos about future space flights, and updates on

space flights for the public that are going on now

- * Current world astronomy events and internet astronomy: how the "World Wide Web" has changed the astronomer's interactions with astronomy

- * Arizona Astro Scenic Photography

- * A Hawaiian Astro video (will be an added bonus if time allows)

- * "Show and Tell Astro Items" - interesting astronomy equipment, including 2-inch bino viewers, "Virtual Glasses", and a rare military lens

Dennis Young has over 35 years of stargazing experience. He has resided in Sedona for 25 years, and for the past 15 years has been a professional astronomer. Early in his career as a photographer, his love of nature brought him to photograph daytime scenery; but his involvement in astronomy gradually added nighttime photography to his repertoire. Dennis specializes in beautiful images of the night sky with

the backdrop of Sedona's amazing scenery. His passion for stargazing brought him to build his own telescopes, and he now uses them for star tours - giving the public a firsthand view of the wonders of the night sky. As Dennis states on his website (www.sedonastarlight.com): "Let me walk you through the cosmos like you have never seen it before."

Dennis is a great speaker! Don't miss this meeting!



February PAS Meeting Review

By Terri, Event Coordinator

The meeting started fairly close to 7:30. Terri opened the meeting, made a few brief announcements, and turned it over to Dan Heim to do his presentation. Dan's presentation was top notch, as usual. He is an awesome speaker and it doesn't matter what topic he presents on, it is always interesting and fun to listen to him. Thank you Dan! As we were leaving the meeting, many PAS members asked me to schedule Dan for another talk, soon. I will work on that.

After Dan's presentation, Terri made a few announcements about upcoming events

such as the April 30 CEO (Cuttin' Edge Observatory) and ALL PAS Star Party / Messier Marathon, the March 19th Moon Marathon at Mike's, and the Awards Ceremony for Night Sky Network Awards which will be held at the March PAS meeting.

Sonny then did a brief presentation / discussion about the astrophotography group he wants to start up on the east side. The location that Sonny and Chet are currently using to do their astrophotography is McDowell Mountain State Park, near Fountain Hills. There is a \$6 fee per car to use that location, but it is open all night. Sonny

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March 2011 Upcoming PAS Events

By Terri, Event Coordinator

March has a nice spread-out line-up of events for PAS members and guests to enjoy.

Mar 3: PAS Meeting at PVCC in Rm G-147, 7pm to 10pm. Guest Speaker is Dennis Young. Topic is "Astro-Scenic-Photography and More". Special Show and Tell by Pete Morrissey, and Night Sky Network Awards Ceremony. Bring a friend!

Mar 4 & 5: Messier Marathon at Two Trees site north of Sedona. For more info, and to attend, contact Dennis Young dennis-young@hotmail.com

Mar 5: Cuttin' Edge Observatory Star Party in Mayer. RSVP is with Chris webmaster@pasaz.org. PAS members only. Please arrive prior to sundown at 6:15pm.

Mar 6: PAS FREE Telescope Workshop at Bookmans, in back room, 3:30pm to 5:30pm. RSVP is required with Terri Events@pasaz.org. Bring a scope and learn how to use it. Open to all ages.

Mar 8: Cancer Treatment Center Star Party. PAS members only. 7:30pm to 9:30pm, RSVP is with Joe jcollins79@cox.net by day before. This is a paid event. Be sure you are on the PAS-times Star Tours Team to be paid for helping at this event. PAS volunteers also welcome.

Mar 10: Indoor / Outdoor Astronomy Event and Star Party at PVCC by Telescope Dome and in Rm G-147, 7pm - 10pm. Come enjoy hands-on activities and handouts in G-147, while viewing sky objects through telescopes in star party outside. Weather permitting. RSVP is requested with Terri Events@pasaz.org.

Mar 22: Cancer Treatment Center Star Party Backup Date. PAS members only. 7:30pm to 9:30pm, RSVP is with Joe jcollins79@cox.net by day before. This is a paid event. PAS volunteers also welcome.

Mar 24: PVCC Telescope Workshop 7pm - 10pm. Meet in Rm G-147 to learn to use your telescope by daylight, then move

outdoors, and learn to use it at night. When you RSVP with Terri Events@pasaz.org, please provide the number in your party, and what scope you will bring that night, so we will have a teacher available to assist you with your scope. Handouts will be provided as well, and Meteorite Man will most likely be present. This is also a PAS Star Party - PAS telescope volunteers needed.

Mar 26: Virtual Star Party at Chris's home in Goodyear. RSVP is required with Chris Webmaster@pasaz.org. Time frame for this night's session will be 7pm to 1am. Bring a snack and drink to share. PAS members only.

Mar 26: Desert Botanical Garden PAID Star Party 7pm to 9pm. PAS-times Star Tours members are invited to sign up to assist at this event by day before. Sam is RSVP Insanas@aol.com.

Apr 7: PAS Meeting in PVCC Library, 7pm to 10pm. Guest Speaker is Richard Hill. Topic is TBA. Bring a friend! ***

Night Sky Network Awards Ceremony

By Terri, Event Coordinator

The Night Sky Network (NSN) and PAS would like to award recognition to those active, helpful PAS members who participate in the events, sharing the night sky with the public. To do this, NSN has provided me with several NSN 2011 pins to give as an award, as well as the ability to make some really nice certificates of appreciation, which will be printed by Don. Twelve PAS Members have been chosen to receive awards for their support to PAS. Four of those members have been specially

acknowledged by NSN for their outstanding public outreach efforts: Frank Insana, Mike Marron, Sam Insana and Terri Finch. The four PAS members will receive awards at the March 2011 PAS meeting along with the other eight PAS members who have gone above and beyond during 2010. To find out who the other eight PAS members are, please be sure to come to the March 3 PAS meeting. We want to award recognition to these PAS members for their efforts and continued support for PAS. Hopefully

Rod, PAS President, will be present at this meeting to be the Awards Ceremony Host. If you receive an award, please participate in the group photo of all twelve award winners. The photo will be taken at the side of the room at the end of the ceremony. Dress for photos everyone! See you at this exciting meeting. We are naming this group of twelve PAS members, the AAA PAS Members - Awesome, Active and Appreciated. ***

No March Meeting of the Minds

By Terri, Event Coordinator

The March Meeting of the Minds has been canceled because several vital PAS Members will be out of town that date. The April 28th MOM's will be the next business

meeting for PAS. Please make a note of this on your calendar, and plan to attend. There could be a lot of topics collected by that meeting. Send your topics my way to ensure

we have a meeting; there will not be a meeting if there are not enough topics. ***

February PAS Meeting Review

Continued From page 1

has asked Dave if we can borrow Room G-147 for a preliminary meeting to see who is interested, and what equipment each interested party should have, in order to make this into a Special Interest Group (SIG). Watch for an announcement about this new SIG.

Then Jerry talked about the upcoming Rocket Launch on February 26 and 27. He also told us about the plaque he prepared, and showed a sample to us (see photos in the Photo Gallery if you want to view the winning trophy) for the Messier Marathon and Moon Marathon that PAS is having. Feb 26th is Jerry's 71st birthday, and he is celebrating and asking that everyone come attend his birthday celebration at the Rocket

Launch. More details can be found at AHPRA.org, or contact Jerry. His number is on page 2 in the PAS Officer's contact list.

Before Jerry was done with his presentation for the evening, he awarded Mike a new, expensive, sturdier case to carry his meteorites in. That was a wonderful thing for Jerry to do for Mike and for PAS. Mike's previous bag was a cooler before it became a Rock Carrier. The new one looks really professional. Thank you, Jerry!

Mike then asked if anyone was interested in his lecture series for the summer. He is planning a four-night lecture series, and only wants to do it if there is enough interest and attendance. If you are interested, be sure to let Mike or Terri know, via email or

phone.

I'd like to thank everyone who brought snacks. Water and candy canes were provided by Ed Wurst. Sam provided a most delicious popcorn. Moon Pies and cookies came to us from Bob Senzer. Chips and dip and some chocolates were seen, but I don't know who brought them. Many thanks to all of you for making this a very fine meeting.

And I wish to welcome our three new PAS Members as of this night: Judy Wolff, Tom Christensen and Phil Drewis. Welcome to PAS! I hope you will have as much fun with us as we have every time we get together to talk, view, or enjoy the night sky and to visit with each other. See you at the March 3rd PAS Meeting!

Mysterious Light Seen in Southeast Sky

by Leah Sapir

A Phoenix resident wrote to PAS: "What is that bright light that is always visible in the southeastern sky in Phoenix, visible from around 5-5:30 in the morning?? I know it is way bright, too bright to be a satellite I would think, and it can't be a star because it is there every morning."

In fact - that mysterious bright light is Venus. It has been a "morning star" since

around November, and will continue to be one for the next few months, although it will start to rise later over time. After around April, it will only be visible during morning twilight, and in July it will disappear completely. Then, around October, it will reappear in the west as an "evening star" after sunset.

Satellites tend to move slowly across the sky, getting brighter as they move high-

er in the sky, and then gradually fading out.

A good website that tells you when to look for various planets is www.nakedeyeplanets.com. (Scroll way down for "Visibility of the Planets in 2011")

Information about satellites can be found at www.heavens-above.com, and at www.spaceflight.nasa.gov/realdata/sightin.gs.

Mini Presentation by Pete Morrissey at March Meeting

By Terri, Event Coordinator

At the March PAS meeting, Pete Morrissey will be doing a mini presentation: Show and Tell on his Peterson binocular holder kit. He will be bringing it to show us, and he will talk about how easy it was to assemble and how enjoyable it is to use. Join us for this presentation! ***

Northeast Valley Imaging Group Meeting

By Terri, Event Coordinator

Sonny and Chet would like to start up a special interest group (SIG) for astrophotography. The SIG's first meeting will be on March 11 at Paradise Valley Community College, Rm G-147, at 7pm. This is not an imaging evening. This is a pre-meeting to find out the interest level, and what equipment is available to each SIG member. If you are interested in doing astrophotography and you want to be part of this SIG, plan to attend. No RSVP is needed. Just be there! ***



Peterson binocular holder kit

First Annual PAS MOON Marathon Mar 19, 2011

By Terri, Event Coordinator

This will be our first Moon Marathon, but not the last. This year, we will do the whole marathon in one night.

Now what, you may ask, is a Moon Marathon? I'm glad you asked! A Moon Marathon is like a star party, except it's a Moon party. And it's also like a treasure hunt. Each participant will be given a list of 30+ features to identify on the Moon in a given amount of time. This year our event will be from 7pm to 11pm. When 11pm comes, the marathon is over.

We will have a potluck prior to the marathon, so you wouldn't be exploring the Moon on an empty stomach. Bring a food and drink to share per person attending.

There will be judges on hand to confirm the discovery of each Moon feature. To win, you need to have a judge initial your list each time you find one of the Moon features, to verify that you have indeed found the Moon feature you were seeking. The Moon Marathon page that will be given to each participant to track the features can be seen at this link: <http://www.pasaz.org/forums/downloads.php?do=file&id=156>

RSVP will be required with Terri prior to the event, so that enough Moon Marathon pages can be printed in time. If you wish to be part of this event but do not wish to compete in the marathon, and you know the surface features of the Moon fairly well, sign up to be a judge! I'd like to have two or three judges available for this event. Judges will be given first choice of the prizes in the prize box for their assistance at this event.

By Terri, Event Coordinator

Prizes are arriving! I've contacted a bunch of companies and asked if they could donate to our First Annual Moon Marathon. I have gotten quite a few unusual prizes. As of the middle of February, we have the following prizes. Edmond Scientific sent us seven Moon Watches. William went on their site and discovered that these watches are worth about \$70 each. They sent us a bunch of other, non-Moon related items as well. From Astronomical Society of the Pacific we got three items of interest: a Moon board game, plus a cool sounding VHS Tape on something about astronomy, and another set of three VHS Tapes on another topic. Sorry I'm so vague. I don't want to give away too much info about our "surprise prizes". But those tapes sound

Judges will have a clip board with the list of prizes and a list of participating marathoners. When each marathoner finds the last feature on the list, the judge will mark down the time at which that person completed the marathon. This is not a hard marathon, but it will probably take at least two hours to complete.

The time line for this event is: Potluck at Mike's from 4pm to 6:30pm. Arrive and set up anytime prior to 7pm. Moon rises at 7:10pm and may not be a good view until an hour later, but the event is from 7pm to 11pm.

How do you enter the Marathon? RSVP is required with Terri via



This is similar to what the Moon Marathon plaque, made by Jerry Belcher, will look like for the 1st place winner.

Events@pasaz.org or 602-561-5698. To enter, you must have your own telescope to work with. All ages are invited. One person per telescope. If a youngster wishes to do the marathon, an adult can assist, if the adult isn't also in the marathon on a separate telescope. Bring your own chairs, jackets, and Moon charts.

Those who finish the marathon may wish to show other objects in the night sky, such as Saturn. This event is open to the public and will be held at the home of a PAS member (Mike) in Carefree.

All prizes will be awarded at the May 5, 2011 PAS meeting. Winners will be given access to the prize box in the order in which they completed the marathon. We expect quite a few marathoners to win. Attendance at the meeting is requested so that the winners can be congratulated for their efforts, and photographed, as well as being able to choose their prizes.

Prizes are being requested from various astronomy sources, so we should have a bunch of really good prizes coming our way. If you have a prize you would like to donate to the Moon Marathon prize box, bring it to an event and get it to Terri so it can be added to the list of available prizes. First place prize will be awarded a trophy / plaque made by Jerry Belcher, in addition to a prize from the prize box.

Sign up today! RSVP's close the day before the event at 3pm so Terri will have time to make copies of the Moon Marathon page, and to prepare the list of participants for the judges. We will see you at Mike's home on March 19 for this event!!! ***

Prizes for Moon Marathon

very interesting. So, I believe we have some good prizes to give away for attending and winning the marathon. Other cool prizes may arrive, as I asked the companies to try to get their donations to me by the end of February, and as of writing this, it is only MID February, so more may come in after this is published in the newsletter. More details will be posted in the PAS forum about the Moon Marathon.

And remember, the first one to complete the marathon will also receive the plaque that Jerry Belcher is making, as well as one of the astronomy prizes. So, it is not only a race to finish the marathon of all 30+ items (if all of them are visible that night) but it is also a race to finish before everyone else to receive the plaque. I believe PAS is reimbursing Jerry for the supplies to make

the plaque. It will be a work of art and well worth competition.

We need judges for this event - if you would like to help out and are familiar with the Moon's surface features, please contact Terri. Judges will also receive prizes for participation.

Sign up today to be part of the Moon Marathon. This is open to the public with the stipulation that they bring and use their own telescope. I need to know your attendance so I can bring enough Moon Marathon pages to the event. The prizes and plaque will be given out at the May 5th PAS meeting. There are many prizes, and it is quite likely that everyone will receive a prize of some sort. Come compete with us! It's all in fun. RSVP to Terri at Events@pasaz.org.***

The PAS Messier Marathon 2011

By Terri, Event Coordinator

This year we have four (4!) locations where you can choose to do your Messier Marathon, to win the fabulous PAS Messier Marathon Plaque, made and designed by Jerry Belcher. Here is the list of locations. Please be sure to RSVP where requested, and check out all details provided here before attending the event. If it is a PAS event, be sure to RSVP in the Calendar, and read the forums about the event for updates and changes to the event.

To win the plaque, you must be a current PAS member, and to have been a member since Jan 1, 2011. Renew your membership today, if it isn't current. You also must be the first place winner among all the PAS members who attended and competed in the marathon. The award will be given at the May 19th PAS meeting, allowing time for all the results of the competing PAS members to be collected by

Terri. Email your results to Terri when you complete the marathon.

1) All Arizona Messier Marathon - the biggest of all the events will be held on April 2 and 3 and hosted by SAC. Details can be found at this link: <http://www.saguaroastro.org/content/messier2011.htm>. Location is Hovatter Airstrip (south of I-10 at Exit #53)

2) Sirius Lookers of Sedona is hosting a Messier Marathon at their Two Trees site. Your RSVP should go to Dennis, as he is running this event. The Two Trees site is north of Sedona, over by Cottonwood. (I have never been there, so I can't be more specific.) Email Dennis for more details, or to RSVP, at dennis-young@hotmail.com. This event is on Mar 4 and 5.

3) PAS is hosting the Messier Marathon (open to PAS members only) at Mike's home in Carefree. It will be a potluck, so bring food and drink to share. Overnight

accommodations are available, if you bring your own bedding. RSVP will be with Terri for this event at Events@pasaz.org. The date is April 30th, sundown to sun up. RSVP on the PAS Calendar, please.

4) PAS is also hosting an ALL PAS MEMBER STAR PARTY (PAS members only) and Messier Marathon at Chris's Observatory (CEO - Cuttin' Edge Observatory) in Mayer on April 30. Start time is 6:40pm, and you must arrive prior to dark. RSVP is with Chris on the website or webmaster@pasaz.org.

Let's have a great competition this year. We want to see a PAS Winner!!! The winner needs to attend the May 19th PAS meeting to receive the award at the ceremony. (Otherwise the winner will miss his/her own ceremony and will need to arrange a later time to informally pick up the award from Terri.)

See you there! ***

PVCC Telescope Workshop & Star Party Review

By Sam Insana

Thursday night, February 10th, there was a telescope workshop and star party at Paradise Valley Community College, sponsored by PAS. Sam brought his 8-inch Newtonian and showed Jupiter, the Orion Nebula, the Moon, double star Gamma Andromedae, the Andromeda Galaxy, and the Perseus Double Star Cluster. Frank brought his small refractor and showed the Moon, the Orion Nebula, and the Pleiades Star Cluster. He also used a 16-inch Dobsonian he borrowed from Dave to show Jupiter, the Moon, and other objects. Gilbert brought his 5-inch refractor and showed Jupiter and

other delights.

There were only about three people from the public who showed up, but they were very excited by what they saw, since the viewing was good, even with all the lights of PVCC.

Judy brought her new small Celestron telescope she had won at the Holiday Party, and asked for help setting it up. Several of us gave her some quick pointers and then she was off to the races. She first looked at the Moon, and then was exploring the night sky and found a "little dipper" (the Pleiades), some double stars, and other objects.

She was thrilled with her new hobby.

Pete Morrissey, a PAS member, brought his Celestron Schmidt Cassegrain and wanted help with collimation. Nobody, however, could help him, this time. We did suggest he call other PAS members, such as Joe Collins, who own similar scopes.

Mike Marron attended with his meteorites and the guests enjoyed his collection.

Bob attended after he finished teaching his math class at PVCC.

Afterwards, six of us went to the Village Inn for a very late, or very early breakfast.***

Virtual Star Party 1/29 Review

By Rod Sutter, PAS President

Well another VSP (Virtual Star Party, for those of you that are new and don't know what I'm talking about) has come and gone. This one was great! The sky was not so good, but we did get a chance to get some data. I started a new object: NGC2024, The Flame Nebula. But hold on, not to get ahead of myself, let me start from the beginning. Sue and I left the house around 6:00, with plenty of time to get to Chris's home, we didn't have to be there until around 7-7:30. I knew that we could not start imaging until after 7:30 anyway because I had already set up a plan from ACP Planner, and knew

what time we would be able to start shooting.

Well things did not go so well to start out. While we were heading over after getting off the 101 onto I-10, traffic was not so bad, but that was about to change. All traffic had to merge to the HOV lane within the next 3 miles. So we decided to get off, but after seeing that the traffic was backed up for more than a mile just to get off the freeway, we decided to stay on.

We finally arrived at Chris's house at 8:15, and sat down to get things going. A few minutes later Louis arrived. Since he

was only there to get an idea about getting started in astrophotography, he had lots of questions. Hopefully he was not deterred by all the info that Chris threw his way. I think he got what he came for though, lots of info from someone who knows which way to go. Since Chris has been down the path before, he could lead Louis in the direction of getting the right things the first time. Hearing about all the trial and error that Chris went through, would make it easier for Louis to decide which way he would want to go.

So we finally got the observatory opened up, and sent the request to start

The PAS Social in Review

By Terri, Event Coordinator

It all started about 3pm on Saturday January 22nd, 2011. Ed and Bette Wurst, along with William and Terri Finch, arrived at the Social, which was being held this year at Chris's home in Goodyear. We began setting up, and I'm so glad we got there early. It took longer to set up since we didn't have Bruce to help us. He was at a Fiddle Contest, winning.

So, after things were set up, people started arriving. Chris had his awesome astrophotos displayed on his big screen TV for everyone to enjoy while we waited for the rest of our group to arrive. I was informed by quite a few PAS members, that they would not be able to make it to the Social until 5pm or later. So, we postponed dinner until 5pm. In the meantime, the Door Prize raffle tickets and the White Dwarf raffle tickets were given out. The available tables were set up, but not all tables were there yet. Matt Kohl brought a bunch with him this year, and so we used his tables for dinner. Thank you Matt! Thanks also to all who brought table decorations. And many thanks to Matt and Ed for setting up the tables so neatly. (Anyone who wasn't there will have to see the photos in the PAS Photo Gallery to see what I am referring to.)

So, 5pm came and we helped ourselves to dinner. Actually it was closer to 5:30 because we were giving Rod and Sue time to get to the event. But people were getting very hungry and kept asking me when we were eating, so I texted Sue on her cell phone and she said to jump in and enjoy the food. It would be another half hour before they arrived.

Some of the foods we enjoyed were lasagna and enchilladas brought by Don Boyd - they were delicious! Pizza and wings were brought by Jerry Belcher. The meatballs brought by Terri Finch were a big hit. William brought his usual, something hot for chips and dip, but this time it had fresh hot peppers from my garden in it, rather than just Dave's Insanity Sauce. It was hot, from what I heard. Frank and Sam brought Church's fried chicken and some side dishes. The cole slaw was awesome, as were the potatoes. Matt brought fudge. I totally forgot to try it, but I heard it was heavenly. Judy, Mike's guest, brought a dessert of carrot cake and tiramisu. That went fast. Once the tiramisu was opened, it was gone in seconds. Mike brought rotisserie chicken, and it was totally awesome.

Steve Palmer brought a veggie tray. Rod and Sue brought desserts. Bette and Ed Wurst brought more desserts, another veggie tray, muffins, peanuts, hot chocolate and a few other goodies. The food was awesome, the people were fantastic and this was an excellent, fun party. You should have been there. Ice and coolers were provided by Chris. We had a nice selection and choice of foods to choose from. I was stuffed.

After we ate and talked, we decided it was time to start the dart game. Ed and William had set it up previously, so we all worked our way outdoors, under Chris's outdoor heaters. I thank him very much for providing those again this year. We played darts for about two hours. Near the end of the game, we also voted on the table decorations. Many photos were taken, so check them out in the gallery on our website.

The White Dwarf Gift Exchange game then took place. Only eleven of us participated. The results were: Jerry got two books ("Skywatcher" and "Big Bang"). Frank got a Carl Sagan book called "Pale Blue Dot" and some chocolates. Sam got a space book. Judy got a TV which led her on a treasure hunt to a telescope. That was awesome! Mike got a solar panel - how appropriate! Bette won the mysterious suitcase that Jerry brings each year and that we all fight over. It was filled with lots of goodies. Steve Palmer took the smallest gift there and was given three wishes by a genie, which led him to three different prizes. Ed got a math clock. He loves clocks! The White Dwarf game went by very quickly - we got comments about how fast it happened. But then we opened our gifts and did door prizes, cleaned up from dinner, and called it a night around 11:30.

Door prizes and all other prizes were awarded after the White Dwarf game. The results of the Dart Game were: Rod took first place, with 13 as his score, and won a most awesome trophy provided by Jerry Belcher. He also received a door prize: a Visual Echo puzzle. Sam and Ed tied with a score of 9 and Don came in third place with 6 points. Ed got a Toy Story Email announcer thingy, and Sam got a book of "Packing for Mars". Don got an Angle Lamp. Bette won the booby prize, but instead of giving away a dart board this time, we gave her a door prize. She got a night light.

The main door prize, of course, given

for attending the Social, was awarded first. Steve Palmer received it: a book "All of Astronomy".

Next we awarded prizes in the Table Decoration game. For the category of "Best Handmade Decoration", Terri took first place with 13 votes and won a book "Seeing Further". The handmade decoration was my space tube. I had made it for a school project when I was getting my teaching degree. The tube has glow-in-the-dark stickers and hanging stars inside. You shine a flashlight into the tube to energize the stickers and stars, put the lid on, and look through the top to see the items glowing inside: space ships, little stars dangling down, a whole space scene. The PAS members seemed to enjoy it as much as the kids did, for whom I had originally made it. For the "Most Unique Decoration", Terri won again with 8 votes, and this time received the "3D Solar System" book. The "most unique" table decoration was the space tube I mentioned above. Chris wanted Terri to win it, and I certainly like it a lot. Then Mike took first place with 11 votes for "Best Overall Table Decoration", and he received an incense burner. Mike's table decoration was composed of two electronic gadgets stuck together that lit up. They looked nice together. There were three categories and three table decorations to vote on. Maybe next year we can have a few more for this game? Depends on if we have tables at the next Social ??? I thought the game was fun but it would have been better if more people were involved in it.

While the dart game and table decoration game voting was happening, Matt was putting together a puzzle Mike got for Christmas which was called IMPOSSIBLE. And believe me, we thought it was impossible. Many people tried it. I gave up. I was doing it during dinner but when I had to go outdoors for the dart game, I left it in Matt's care. Matt was awarded a door prize for completing the puzzle: he received the Night Sky Pocket Guide. Several additional door prizes were awarded, and I wish to thank all who donated door prizes. Remember, door prizes do not have to be astronomy related. Just something you want to pass along, donate to PAS, for the fun of it. There was a Starry Night Galaxy that was won by Sam and Terri. Matt won a night light, and Chris won a CD.

Many thanks to these folks who helped make this event a success. Jerry brought the



Rod wins Dart Game at 2011 PAS Social!



Having fun at the dart game.



Playing the White Dwarf Gift Exchange game.



The Planets This Month

by Leah Sapir

Jupiter is still gracing our western sky this month, but it will soon be fading into the sunset. It sets at 8:30 pm at the beginning of the March, and 7 pm towards the end of the month. In the meantime, Saturn is now at opposition – which means it is up all night, and at the closest point (to us) of its orbit - so this is a great time to view it. Saturn rises at 9 pm at the beginning of March, and 7 pm towards the end of the month.

Mercury will be an evening star in March, and for a week or so past the middle of the month it will be a bit higher than usual. So while it's usually difficult to see Mercury, try looking in the west after sunset in the second half of March, especially around March 20-25. Mercury sets around

6:40 pm at the beginning of March, and 8 pm after midmonth.

Mars and Uranus are both too close to the sun to see this month, but are on their way to becoming morning stars. Neptune is still lost in the glow of sunrise at the beginning of March, but will be emerging as a morning star after midmonth. It rises around 6:30 at the beginning of March, and 4:30 towards the end of the month.

Venus has been a morning star for a while, and is visible in the southeast before sunrise. It rises around 5 am all month – but sunrise will be getting earlier, so towards the end of the month, Venus will still be visible, but will be fading into the twilight.

The crescent Moon will be near Venus before dawn on March 1, and near Jupiter

after sunset on March 7. Then, around first quarter, the Moon will be visiting the Pleiades on March 10 and the Hyades on March 11. On March 15-16 we have a double feature (or should we call it a double-double feature? J) – the moon will be near the Beehive cluster high in the west after sunset, while near the western horizon, we will see a conjunction of Jupiter and Mercury.

The crescent moon will be below Mercury low in the west after sunset on April 3, and above Mercury on April 4; but both will be very close to the horizon. Try to find them during twilight, before they get too low.

The new moon is on March 4, the first quarter on March 12, full moon on March 19, and last quarter on March 26.

2011 Award Ceremonies

By Terri, Event Coordinator

I've been getting a bunch of emails asking when the awards will be given for the various competitions we have going on this year. To be fair, and have the awards at a time that everyone can attend, enjoy, and be congratulated, here is the schedule for March - May 2011. This is to clear up any confusion and allow those who have to create or tally for the awards, time to get it all done.

Mar 3 PAS Meeting - Night Sky Network Awards before the Guest Speaker. Following the awards will be a brief Show & Tell by Pete Morrissey. Then Dennis Young can have the rest of the evening for his presentation. So, award will be as close to 7:30pm as possible. Do not be late for this meeting.

May 5 PAS Meeting - Pizza party provided by PAS. Bring a snack to share, water provided by Ed Wurst, and we will do the

NSN Awards Ceremony & Elections. Then turn it over to our guest speaker.

May 19th Special PAS Meeting - Messier Marathon Awards Ceremony, then our guest speaker.

I do hope this clarifies the lay out of the Awards Ceremonies, and I hope to see everyone at these meetings, even if you are not receiving an award, we want you there to help us congratulate the winners. ***



You never know what unusual astronomy gift will become yours playing the White Dwarf Gift Exchange game or what Treasure Hunt/Safari you will have to go on, to find your gift.

Cancer Treatment Center (CTCA) Review of Feb 8th

By Joe Collins

We had a successful event last night at CTCA. Sam and Frank and I worked the event. The Insanas started solar viewing with the Coronado at 5pm. We took a dinner break in the Cafe at sunset and resumed the night program from 7pm to 9:15pm. Frank focused his spotting scope on the Moon. Sam showed off several objects with his reflector during the night. I stayed a little later (until 10pm). We had record attendance of 22 participants, including eleven caregivers and family members, and the rest were patients. Blas, one of the former patients I know, who is now working on the "H.O.P.E." Team (hospital auxiliary for CTCA) was hosting a new-patient welcome dinner, and brought everyone up afterwards. Marisa and CTCA did a fantastic job advertising this event. It would have been more comfortable for the guests if we had

hot coffee and hot cocoa instead of ice water; but I got an agreement from the hospitality staff that next time they would have coffee and hot cocoa. If only we had better viewing conditions....

Even though we had the best turn out, ironically, skywatching-wise it was one of the worst nights ever. True to accuWeather.com, it was clear of clouds (we didn't see the 30% cloud cover predicted by NOAA, doubtless due to considerable wind with gusts up to 15mph). The chill factor brought the temperature well below the advertised 37 degrees, so we used the southeast stairwell to warm-up. Fortunately, the wind decreased after sunset, but there was so much turbulence and dust in the sky that we could not even view any features on Jupiter - at 100X it looked like a wavering blob. Even the edges of the

waxing crescent moon looked wavy due to the high-altitude turbulence, and it was impossible to resolve binary stars.

Our best viewing of the night was high in the sky (near the zenith) and to the south-east. The Orion Nebula and the Pleiades looked stunning. Sam showed quite a few folks the nucleus of the Andromeda galaxy. We did a lot of explanation about how things would look if it was much darker, less turbulent, and/or if we had an ideal photographic setup (like the pictures on the iPad Skywalk app). Many participants enjoyed the stargazing despite the cold. We even had one patient who braved the dark and the cold while dragging along an IV chemo pump!

We hope that next time we will have better weather and be able to show more objects in the sky.***

Virtual Star Party 1/29 Review

Continued From page 5

acquiring data. The first bits of data were coming in when the sky was not really good, but you know what, any data is good data. You can always save it and add to what you get later on. I was asking Chris about how much data he has stored, and his answer was, "More than enough to keep me busy for years." I asked if I could use some of his data to work with, and he was more than happy to give me some data from M-63. Like 430 megs of it! I figure that once I get started learning how to process this stuff, it will give me a starting point. I do have some data that I saved from the last

VSP, I just really haven't had the time to process it. Now I know how Chris feels, all this data and no time to process it.

It's easy to get the data, you should come out to a VSP sometime and see how easy it really is. Getting the data is easy and simple, but finding the time to process it is hard to do. I am usually at every VSP, and Chris is always happy to help, and most of the programs you need are available online and are free. If you want to come out and get data, you can use my computer to get started, I have all the files needed to get

your foot in the door. After the data has been downloaded I'm sure Chris can put it on a CD that you bring with you, with no problem. If you don't have any CD's I will bring some for you, I have plenty of them.

So come out some time, and let us show you how simple and fun it is to acquire images. I am still learning, there is so much to learn about this, and this is the best place to start, at our own VSP.

And the best part is that Chris is willing to teach anyone who wants to learn. It's a PAS project and it's free!

Desert Mountain School Review Feb 17

By Pete Morrissey, Dennis Young and Staff writer

PAS presented a star party at the science fair of Desert Mountain School in the Deer Valley School District on February 17. Our contact was Milissa Holder, a science teacher at the school. PAS members participating were Pete Morrissey, Dennis Young, Mike Marron and Don Boyd.

Pete writes:

We arrived at about 5:30pm. Milissa was very helpful, welcoming us and allowing us to drive right to where we wanted to set up. Dennis arrived at about the same time and helped perfect our exhibiting location, to make it more centrally convenient for students and parents.

The Science Fair was pretty well supported by ASU, the Fire Department, Maricopa County Sheriff's Office, and PAS.

There was a steady stream of parents and children at the fair, many of whom came over to observe my CPC-8 and Dennis's scopes and binocs.

I mostly showed views of the Moon, Jupiter and its moons. The only drawbacks (for me) were the dusty location and the viewing conditions (full moon, and police cars and fire trucks with flashing lights, plus the parking lot lighting was aimed right at us.)

Dennis adds:

The star party went well, though we had only a couple of others there for helping out with the overwhelming crowds. We were well received by the group, though the lines were long. I had four instruments running at the same time. The weather was good.

Pete continues:

Some things I learned on my first try were:

- * I wish I had a small handout on astronomy and PAS for people who expressed some continuing interest.

- * Some visual aids might have helped explain what people were viewing (e.g., a diagram of the solar system.)

- * It was great having another person with me for "crowd control". It was nice having an "old hand" like Dennis there, too.

- * I could have used a small step ladder or platform to make it easier for little kids to view. (Doctors say my back should recover in a few weeks.)

The attendees began to thin noticeably about 7:30. We packed up about 8pm and left. All -in-all, I think people appreciated our participation.***



Thank Goodness the Sun is Single

By Trudy E. Bell

It's a good thing the Sun is single. According to new research, Sun-like stars in close double-star systems "can be okay for a few billion years—but then they go bad," says Jeremy Drake of the Harvard-Smithsonian Astrophysical Observatory in Cambridge, Mass.

How bad? According to data from NASA's Spitzer Space Telescope, close binary stars can destroy their planets along with any life. Drake and four colleagues reported the results in the September 10, 2010, issue of *The Astrophysical Journal Letters*.

Our Sun, about 864,000 miles across, rotates on its axis once in 24.5 days. "Three billion years ago, roughly when bacteria evolved on Earth, the Sun rotated in only 5 days," explains Drake. Its rotation rate has been gradually slowing because the solar wind gets tangled up in the solar magnetic field, and acts as a brake.

But some sun-like stars occur in close pairs only a few million miles apart. That's only about five times the diameter of each star—so close the stars are gravitationally distorted. They are actually elongated toward each other. They also interact tidally,

keeping just one face toward the other, as the Moon does toward Earth.

Such a close binary is "a built-in time bomb," Drake declares. The continuous loss of mass from the two stars via solar wind carries away some of the double-star system's angular momentum, causing the two stars to spiral inward toward each other, orbiting faster and faster as the distance shrinks. When each star's rotation period on its axis is the same as its orbital period around the other, the pair effectively rotates as a single body in just 3 or 4 days.

Then, watch out! Such fast spinning intensifies the magnetic dynamo inside each star. The stars "generate bigger, stronger 'star spots' 5 to 10 percent the size of the star—so big they can be detected from Earth," Drake says. "The stars also interact magnetically very violently, shooting out monster flares."

Worst of all, the decreasing distance between the two stars "changes the gravitational resonances of the planetary system," Drake continued, destabilizing the orbits of any planets circling the pair. Planets may so strongly be perturbed they are sent into collision paths. As they repeatedly slam into each other, they shatter into red-hot

asteroid-sized bodies, killing any life. In as short as a century, the repeated collisions pulverize the planets into a ring of warm dust.

The infrared glow from this pulverized debris is what Spitzer has seen in some self-destructing star systems. Drake and his colleagues now want to examine a much bigger sample of binaries to see just how bad double star systems really are.

They're already sure of one thing: "We're glad the Sun is single!"

Read more about these findings at the NASA Spitzer site at www.spitzer.caltech.edu/news/1182-ssc2010-07-Pulverized-Planet-Dust-May-Lie-Around-Double-Stars. For kids, the Spitzer Concentration game shows a big collection of memorable (if you're good at the game) images from the Spitzer Space Telescope. Visit spaceplace.nasa.gov/en/kids/spitzer/concentration/.

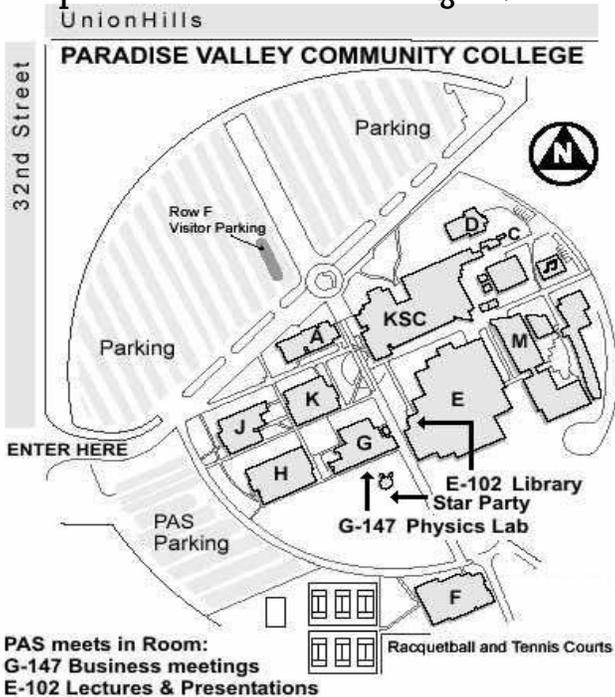
This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



Planetary collisions such as shown in this artist's rendering could be quite common in binary star systems where the stars are very close.

Map to PAS Meeting Location

The PAS Social in Review



Continued from page 9

Dart Game Trophy. It was absolutely beautiful, and if I hadn't been distracted by the Table Decoration Game, I might have been giving Rod a run for his money. Watch out next year! I'll have to practice up and win. That trophy was beautiful. Many thanks to Matt for bringing the dinner tables. We had plenty of room to eat and enjoy food. Chairs were brought by Ed, Sam, Chris, and I think Mike. Rod provided five door prizes and Chris brought three. I brought one, just in case I didn't have enough on hand. We had plenty and everyone seemed happy to get something. Oh, and don't forget, Ed brought 30 wrapped boxes of candy canes for the taking. Everyone was supposed to take two boxes and pass them out to family, friends, grand kids, etc. We left with most of them. Photos were taken by Terri, Rod and Don. Total attendance this year was 15 PAS members. Eleven of them played the White Dwarf game, and about eight played the Dart Game. The 9th player was Chris's son, Jacob. Everyone got in on the voting. And many many thanks to Tiffany, Chris's wife, for opening up her home to us so we could have this awesome party. Tiffany and Chris - thank you so much! I wish to thank all who helped clean up at the end of the party. It was a great party, easy going, not rushed, and I believe everyone had as much fun as I did. ****

Please see page 2 for more information

March

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3 PAS meeting in G-147	4 Messier Marathon at 2 Trees	5 CEO Star Party
6 Bookman Telescope Workshop	7	8 CTCA Star Party	9	10 Indoor Event at PVCC	11 N.E. Imaging SIG meeting, see pg 3	12
13	14	15	16	17	18	19 Moon Marathon, see pg 4
20	21	22 CTCA Back up date	23	24 Telescope Workshop at PVCC	25 VSP	26 DBG Star Party
27	28	29	30	31		

Ads in PAStimes

Ads in PAStimes run for a month and may be renewed on a month-by-month basis, if submitted by deadline, space permitting. Ads in PAStimes are FREE to members. All others are asked to make a small donation. Donations are to be sent to the Vice Prez who will forward them to the Treasurer.

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

To:

This May Be Your Last Issue of This Newsletter

By Terri, Event Coordinator

I'm running a little late updating the PAS Roster and PAS Website, but by the end of February, those who are not paid up on their dues for 2011, will be taken off the Roster and off the PAS Website. If you are unsure if you are paid up, please be sure to check with Mike. His number and email is on Page 2 of this issue in the Officers' list. Mike is our Treasurer and he has the current info available. Please take a moment to double check your status with PAS. Have a super day! ***

PAS Speaker Line-up for 2011

By Terri, Event Coordinator

Apr 7: Richard Hill - Topic: TBA

May 5 in G-147: Dolores Hill + Pizza Party + Elections + Moon Marathon Awards Ceremony - Topic: "Meteorites: Keys to Understanding the Solar System"

May 19 in G-147: Robert Piccioni + Party + Messier Marathon Awards Ceremony - Topic: "Einstein for Everyone"

We have an awesome line-up of guest speakers to finish out this PAS season. Should you have an idea for a future guest speaker, please send those suggestions to Events@pasaz.org. I will do my best to get them as our next guest speaker. To find out more about our upcoming guest speakers, please visit this [link: http://www.pasaz.org/forums/downloads.php?do=file&id=8](http://www.pasaz.org/forums/downloads.php?do=file&id=8) ***

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What's Up For March

By Rod Sutter, PAS President

Name	Date	Rise	Set
Mercury	03-1-11	07:10	18:38
Venus	03-1-11	04:44	15:06
Mars	03-1-11	06:43	17:52
Jupiter	03-1-11	08:11	20:25
Saturn	03-1-11	20:57	08:41
Uranus	03-1-11	06:21	19:50
Neptune	03-1-11	08:08	17:19
Pluto	03-1-11	03:02	37:26

All Times Arizona Time

March 15 2011

Sunrise: 07:08

Sunset: 18:10



New: March 4



Q1: March 12



Full: March 19



Q3: March 26