

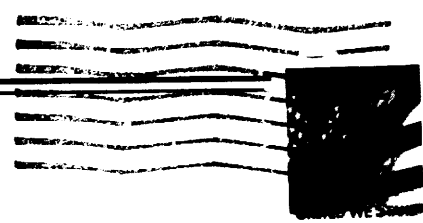
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nightwatch

Newsletter of the Pomona Valley Amateur Astronomers

Amateur
astronomers
just get better
looking ...



CLAIRE STOVER

NEW PVAA Hotline: 909-596-7274

Volume 22 Number 1

nightwatch

January 2001

Presidents Message

If one day I were stopped on the street by an old wise man with long beard and big eyes and told that I will witness a miracle, I would probably give him a few bucks and wish him a good day without thinking twice about the miracle part. Miracles in my view are real stories transferred from one generation to another with small contributions of the narrators. The end product is so unbelievable or inexplicable by the laws of nature that we try to explain them by either supernatural forces or as an act of God.

Probably there was a sick man in that town and the holy man gave him a massage and sick man felt better. I guarantee in two generations the story will be like "The holy man healed the sick man touching on his shoulders"; in 4 generations it will become like "The holy man touched the dead man and he rose from his grave".

After clarifying my position in this matter, I will make a 180° turn and say, "I witnessed a miracle!"

Our daughter Melis was born on December 14th. An event so simple, so complex, painful, joyful and exciting. For some minutes I was speechless. I had no doubt I have witnessed a miracle.

Actually it was an ordinary day in cosmos. At the same moments, the annular So-

lar eclipse was taking place, comet Linear drifting in constellation Sculptor, the secondary component of the binary star system RY Aquarius was passing in front of the primary, causing a significant drop in the magnitude, the asteroid Luthera is getting close to a 10th magnitude star that it will be occulting the following day, another asteroid 2001, YB5 was approaching Earth was still unnoticed. For me it was the most exciting day of my life.

Another life began like 6 billion others. It's another story about to begin.

Statistically in the year 1 AD there were 250 million people. Right after 1700's by the advancements in agriculture medicine and hygiene there was less starvation, the famines disappeared, epidemics became less serious and the balance between birth and death was broken. From then on there were more births than

PVAA Events Calendar

Month	Star Party	General Meeting	Board Meeting
January	12	25	4
February	9	22	1
March	16	22	1
April	13	26	5

deaths. In 1800 there were 1 billion people. Today every second five people are born and two people die, a net gain of three people.

The lucky ones are born in developed countries and enjoy benefits of a comparatively easier life. The rest have to bring water from the well or dig frozen soil to get potatoes if they are among the lucky 30% who were born alive. Unfortunately, over 4 out of 6 billion people live in such conditions. A hungry man who is in doubt what he will be eating the next day can't have hobbies. Amateur astronomy can't flourish in such an environment. Thinking about all these we should be grateful for what this country offers us.

I will show Melis the true beauty of the desert and the sky like my father showed me 20 years ago. You'll see us together at the star parties in a few years. They will be my happiest moments.

Alper Ates

New HOTLINE Phone Number

The sharp-eyed among us (all astronomers are sharp-eyed aren't we?) may have noticed a new phone number for the PVAA HOTLINE. You may now dial PVAA anytime, day or night, and listen to a recorded message with information on the next meeting, the next star party, and any particularly interesting astronomical events. Occasionally we may throw in local events of interest to us as amateur astronomers. The phone number is 909-596-7274. Give the hotline a try. We have gotten a new answering machine without the memory gaps of the old one, and are promising to keep the message faithfully updated and current. Remember, 909-596-7274.

To encourage you to dial the HOTLINE, and to perhaps put it on your speed-dialer, we are offering a fabulous cornucopia of astronomical prizes to anyone who listens to the special message that will be put on sometime between now and the February meeting. (well, the prize is fabulous to us; it may be merely significant to you) This contest is open to anyone, member or not, who hears the special message and follows the special instructions to claim the prize. If no one claims it this month, the prize will get more fabulous next month. Just like the Lottery.

Don't forget: 909-596-7274.

Ludd Trozpek

PVAA Equipment in New Home

Bob Akers, the club VP for Facilities recently finished moving the club equipment, telescopes, books, and boxes of goodies from rented storage to donated storage in La Verne. This saves the club several hundred dollars a year in storage costs. To house the steel shelves and to protect the telescopes, Bob built an eight-foot high storage cabinet over ten feet wide and 2 ½ feet deep. There are locks on the doors and the club items are safe and secure.

Rumor has it that Bob built this cabinet on his patio, and then moved it all in pieces for final installation on site. It's hard to understand why his wife Julie was getting just a little tired of having three large doors and a half-dozen big pieces of plywood, two-by-fours, and assorted power tools—not to mention the sawdust—all over the patio for weeks and weeks. Anyway, it is a sight to behold now, filled with lots of good astro stuff. You get an idea in the accompanying picture showing Bob admiring his handiwork.

The club owes a debt of gratitude to previous Facilities VP Dave Gardner for organizing and keeping the equipment during his tenure. It was all accessible and easy to move re-

..PVAA 24 HR. Hotline.

Get the latest news on the star party, club meetings, special events and astronomy happenings.call 909/596-7274

Visit or website at:

<http://www.cyberg8t.com/patrick/PVAA.htm>

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ports Bob.

While on the subject of equipment, long-time club member Steve Simon finally decided he needed to use his guest house for—what?—a guest, and the club and several dozen other storage tenants had to move equipment from his building. We had a lot of telescope-making supplies and goodies at Steve's and these have now been consolidated for the most part with the other club equipment in La Verne. There were a couple items that were too large, and so these items, a mirror test bench and a mirror grinding machine, found their way to the garages of club VP Joe Hillberg and Bob Akers, respectively. Thanks to these two for taking up the slack, and thanks especially to Steve Simon who so graciously let the club basically own his guest house for years and years. Some of us remember fondly the telescope-making classes conducted by John Dobson in Steve's back porch, back yard, and guest house in 1993.

Thanks to all of the above, not forgetting Julie Akers for her forbearance, who contribute to the club in these important ways.

And don't forget: the club does have a modest amount of equipment to loan. So if you don't have a telescope, or if yours is "in the shop", or if you need a pair of 7x50 binoculars to borrow, or an eyepiece, Bob can help you out with a loan. He also has a small library and other goodies. Ask him.

Ludd Trozpek

Frontiers in the Exploration of Space

At Galileo Hall at 7:00 PM, distinguished speakers.

February 7: Carolyn Porco, of the Southwest Research Institute. "The Summer of '04 — The Cassini Mission to Saturn".

February 20: Torrence Johnson, of Jet Propulsion Laboratory. "Galileo Explores the Jupiter System".

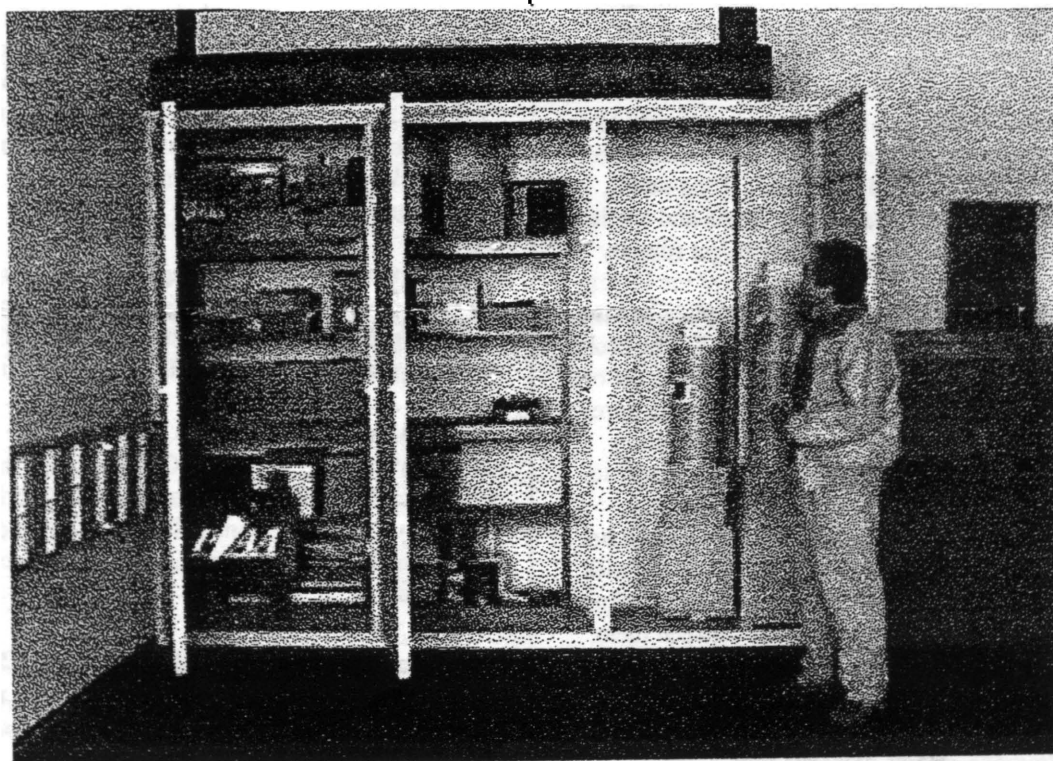
Watch this space for further announcements.

February Star Party

The February star party will be held at Joshua Tree National Park. Cottonwood Springs campground is the site.

To get there, take the interstate, I 10 about 20 miles past Indio. Exit the highway at the Joshua Tree exit (Cottonwood Springs road), go north about 7 miles. At the entrance station turn right, go past employees residence road, past the dump station, and turn left toward the campground. Go to loop "B", half way around the loop.

If on the way to the campground, you see the Patton War Museum on the north side of the road, you have gone 4 miles too far.



Bob Akers looking over the club's new storage facility

Furtive Fugitive Photons Finally Found

After billions of years on the run, having long successfully evaded capture, escaped photons from a distant quasar were finally cornered and corralled in Cottonwood Springs Campground at 4:15 AM on the morning of January 13, 2002. In captivity, the fiendish photons confessed to having taken advantage of an elliptical galaxy (of prodigious proportions and immense mass) applying a process, which they referred to as "gravitational lensing", in order to reach their destination: Earth. The giant conglomeration of unsuspecting stars, reputed to contain a trillion suns, was oblivious to having been used by the felonious photons for their daring escapades and nefarious schemes. The photons stated that they "made [their] big mistake in choosing to fall on the 380 square inches of Joshua Tree National Park occupied by the mirror of a 22-inch Dobsonian telescope which was being monitored by Bob Akers and Ron Hoekwater." The photons felt confident that they would otherwise have safely "eluded detection."

The previous paragraph may have been somewhat tongue in cheek, but Bob Akers and I had a great time at the January star party. At the start of the evening the sky was partly cloudy and it got worse before it got better. But the "Cottonwood Springs luck" held and the seeing was much improved by 10:30. The transparency continued to be very good with the steadiness just so-so for the rest of the night.

One of the great things about going out to a star party with Bob Akers is seeing all of the delightfully interesting things he finds in his 12.5-inch telescope and 80 millimeter binoculars on a nice parallelogram type mount. He (unlike myself) always arrives well prepared, with an observing plan and computer generated star charts. First on his evening's agenda were a pair of asteroids, Vesta and Metis. Vesta is presently magnitude 6 and an easy target (plainly visible even in 7x50 binoculars). Vesta is one of the largest asteroids at 320 miles in diameter. NASA has plans to visit Vesta in July 2010 with the space probe "Dawn." The probe will be powered by an ion propulsion system, such as the one in the Deep Space 1 mission, which passed by Comet Borely and then proceeded on to complete its technology testing journey. Metis is magnitude 8, but its current proximity to the bright star Pollux in Gemini is an aid to finding it.

Next on the list were a series of faint and some not so faint fuzzies. NGC4485 and 4490 are colliding galaxies that struck each other a grazing blow and now are speeding away from the scene stretching material out between them. M 106, M 109, and M 63 are three galaxies from Messier's Catalog worth revisiting. M 3 is a spectacular globular cluster, warranting another look. We also checked in on Jupiter, Saturn, the Andromeda galaxy, and the Orion Nebula.

The one object that I had planned on hunting down was the Double Quasar (QSO 0957+561A/B) in Ursa Major. At first believed to possibly be two separate objects, the Double Quasar is now known to be one object split into two images of itself by the gravitational lensing of an enormous elliptical galaxy, 3 billion light year distant from Earth. The Quasar, with a red shift of 1.41, is believed to be between 6 and 7 billion light years away. At 17th magnitude this was not going to be an easy object to see even in a 22-inch scope. But with superb charts, digital images, and descriptions supplied by Jeff Felton and about an hour of intense searching, straining our eyes at the eyepiece, Bob and I were ultimately able to find the twin quasar. We confirmed to each other what we had seen with a drawing of the star field on the sandy ground beneath the telescopes. It was one of the BIG thrills of my observing life. This object is so far away that when the quasar's light started on its journey, *there was no Earth!* Even the Sun did not yet exist! And the universe was only about half of its present age.

February's star party is also planned for Cottonwood Springs. Call our new hot line number (596-7274) for more information

Ron Hoekwater

Astronomy Illustrator to Speak

We are fortunate to have for our January speaker Mr. Chris Butler. Chris is a well-known southern Californian amateur astronomer, painter, and astronomical illustrator. His work has appeared on the pages of Sky and Telescope and in the Times of London, as well as on CNN. He is a regular at the Orange County Astronomers, where he occasionally gives an exciting "What's Up". He is staff illustrator at the Griffith Observatory.

Chris's artistic images are compelling and imaginative. One shows a view of a city on a planet circling a star near the edge of a galaxy but enough out of the disc of the galaxy so that the spiral arms and glowing center loom in the sky.

We are fortunate to have Chris join us because he always gives a lively talk. In view of Chris's strong interest in science education, this would be a good talk to bring the kids to. He will make sure their interests are directly addressed while he also challenges the imagination and technical knowledge of the adults.

Remember, hear Chris Butler at the January 25 meeting, Galileo Hall, Harvey Mudd College, at 7:30 p.m.

Ludd Trozpek

PVAA 2001 CHRISTMAS DINNER PARTY



John Dobson to Speak at PVAA in February

This exchange was recounted in the Wall Street Journal a few years ago:

John Dobson is known as a stickler for detail.

At the moment, he is focused on the fine points of grinding a telescope mirror by hand. "The curve has to be perfect to within one one-thousandth of the thickness of Saran Wrap," he instructs a roomful of students at a telescope-making class.

"What if we're way off?" a voice pipes up.

"What!" the wiry, 81-year-old Mr. Dobson shrieks, his white ponytail flipping behind him as he searches the class for the upstart. "We don't give you instructions to get you way off! We've made a few thousand of these," he yells. "We think we know what we're doing."

PVAA is fortunate to have the opportunity to present the irrepresible, iconoclastic, brilliant John Dobson, the father of the "Dobsonian" type of large-aperture telescope, to everyone in the Pomona Valley and Inland Empire. He will be speaking at our February meeting, Friday, February 22, in Galileo Hall at Harvey Mudd College in Claremont. Mark your calendars now and look for more information in the next *Nightwatch*.

Ludd Trozpek

