

# "CLEAR SKIES"



**NEWSLETTER of the CHAMPAIGN-URBANA ASTRONOMICAL SOCIETY, Inc.**  
An affiliate of the Champaign Park District

Volume 21  
Issue 11

November, 2008

## CUAS OFFICERS MESSAGE

Last month we talked about picking your next or first telescope and we had a few interested new people that were in the audience. After the meeting they thanked us for the help, so the meeting was a success. The meeting also had next years officers nominations on the agenda, not a lot of new takers, I guess this month's general elections are on peoples minds. The general consensus was to nominate this years officers, Guy Hampel for president, John Stone for Vice President, Mike Conron for secretary, Willard Brineger for treasurer and Mike Lockwood for 5<sup>th</sup> director, for serving an additional year. If you have any additional nominations please bring them to the next meeting to be brought up prior to actual voting. The month of October/November's viewing sessions have had typical Illinois weather, meaning who knows what will happen. The Allerton Park's dark sky session was canceled do to soft ground and questionable weather, though the sky in typical fashion viewing was great as attested by a guest that showed up and bothered to e-mail us. The public session on the 1<sup>st</sup> was another one of those nights that was scheduled for 70% cloudy and canceled, I went out anyway to check the property and see if someone would show up since the weather was warm. I did not stay long just until about 7:00pm and of course when I arrived up back home the sky cleared enough to recognize some of the constellations, oh well next month maybe better. Observations of condition of the site is that we seem to be providing a private parking spot behind the pine tree, a donut track for cars and it seems that we need to do some maintenance as the dome is peeling and both the dome and the sign will need paint by spring if not sooner.

Now for the positive! This month's topic is 'Are star parties worth the trip?' Mike Lockwood and John Stone will share their experiences this year and try to get us excited about attending at least one of the many smaller nearby, to state wide ones, to the distant ones at dark sites that these guys say are worth seeing at least once.



## CUAS DIRECTORY:

Guy Hampel, President	352-3690
John Stone, Vice-Prez	337-1893
Mike Conron, Secretary	355-5996
Willard Brineger, Treasurer	356-5929
Mike Lockwood, 5 <sup>th</sup> Director	398-9778
Phil Wall	352-5442
Bill Marble	621-7882

Remember that next year we as amateur astronomers are celebrating the International Year of Astronomy by sharing our time and telescopes with the public in our area Parks with the goal to help provide the opportunity for everyone to look up at the night sky. The final planning of what we as a club want to share or if we want to try to keep each session somewhat similar will start at the February '09 meeting.

Guy

### **Editors corner:**

In this issue of Looking up this month, Dave talks about the four planets we are all interested in, Venus, Mars, Jupiter, and Saturn. He tells us where these objects will be at certain times of the month.

Under CUAS news, read about Astronomy year 2009. Let's pay particular attention to the 2009 parks sign up for the night or nights you are available to be at one them.

Also note the upcoming talks of interest to club members. Also note the calendar of events.

### **LOOKING UP THIS MONTH**

The action this month occurs in the southwest during the evening hours just after sunset. Have you seen Venus yet? You might confuse it for an airplane coming in to land with its landing lights on! It's pretty bright! This month Venus heads eastward at about a degree per day, over the top of the Teapot of Sagittarius. On the 17<sup>th</sup> it passes only 8 arc minutes from Kaus Borealis, at the top of the Teapot. The star marks the top of the bow of our summer centaur.

Venus is speeding towards Jupiter, which starts the month about 30 degrees (about three fists held at arm's length) to the east. This distance shrinks to two degrees on November 30<sup>th</sup> with Venus being below Jupiter. The Moon will slide by the pair twice this month, both early and late. On November 1, the Moon is to the left of Venus. Two days later, the Moon is below Jupiter. At the end of the month the Moon approaches again. On December 1, the Moon is just to the left of the planetary pair. This is a great opportunity to get out the camera and shoot a couple of shots. Three of the top four brightest objects in our sky (the Sun is the other) are near each other in the sky. The pair sets at 7:30pm on the 30<sup>th</sup>.

Mercury starts the month in the morning sky, though it will be tougher to see as each day goes by. Mercury is coming off its best morning appearance the third week of October. On the 10<sup>th</sup>, it rises at 6am. Right around Thanksgiving, it passes behind the Sun and will spend December in our evening sky. Technically Mars is in the evening sky but it's about to lose its battle with the Sun's glare. At about mid-November, Mars sets at 5pm, well before the end of twilight. Saturn rises at 2am on November 3 in the east. By the end of the month, the rise time is 12:30am. Look for it near the triangle of stars that marks the hind legs and tail of Leo, the Lion. The Moon appears to the right of Saturn on the morning of the 21<sup>st</sup>.

The magazines report good views of two asteroids this month. Look early in the month for Vesta. In November, Vesta a 7<sup>th</sup> magnitude object situated just to the star Gamma Ceti. At mid-month the asteroid Juno is an 11<sup>th</sup> magnitude object near M16.

The Leonid meteor shower peaks during the pre-dawn hours of November 17. The Moon is a waning gibbous phase this morning, rising just after 8pm. You'll still see a couple of shooting stars, but the fainter ones will be washed out.

-DCL

## ***Moon Phases***

### ***Waning Gibbous Moon***



1 <sup>st</sup> quarter	November 7	December 5
Full	November 14	December 12
Last quarter	November 21	December 19
New	November 28	December 27

## ***CUAS NEWS***

**International Year of Astronomy** update . . . when you get the chance, look at a 2009 calendar and sign-up to work a night of two of our IYA park tour. The schedule follows and is also on our web site. If all of us take a night or two then no one will be overtaxed. The Staerkel Planetarium has applied to receive some large prints (as in 3-feet by 6-feet) of a new Hubble image plus host a teleconference as a part of a IYA kick-off. More information on this will come forward early next year; see also: <http://hubblesource.stsci.edu/events/iya/>. The planetarium should also be receiving a new program called "Let There Be Night!" on IYA and the light pollution issue. The Night Sky Network hopes to reach one million people next year and want us to help with our park tour. They will supply materials including:

- Monthly IYA Discovery Guides - Internationally accessible and complete with articles, activities, and finder charts
- A fully searchable online database of Night Sky Network activities and other astronomy resources, many accompanied by online videos
- A calendar of worldwide and nationwide astronomy events for us to become a part of
- Ways to get more of club members involved
- Free NASA handouts to active NSN clubs
- Monthly telecons for NSN members on the monthly IYA Themes

They'll announce these items on October 31. Members are encouraged to see the latest at:

[http://nightsky.jpl.nasa.gov/download-view.cfm?Doc\\_ID=300](http://nightsky.jpl.nasa.gov/download-view.cfm?Doc_ID=300). The web site for the PBS documentary, "400 Years of the Telescope" is here: <http://www.400years.org/>

Mon	Mar. 30	8-10pm	Douglass, C
Thu	Apr. 2	8-10pm	Crestview, U
Mon	Apr. 6	8-10pm	Prairie, U
Tue	Apr. 21	8:30-10:30	Eisner, C
Tue	Apr.28	8:30-10:30	Blair Park, U
Thu	Apr. 30	8:30-10:30	Robeson, C
Mon	May 4	8:30-10:30	Morrissey, C
Sun	May 17	8:30-10:30	Hessel Park, C
Tues	May 26	8:30-10:30	Cherry Hills, C
Thu	May 28	8:30-10:30	Meadowbrook, 1
Wed	Aug. 26	8:30-10:30	Anita Purves, U
Thu	Aug. 27	8:30-10:30	Lohmann, U
Tue	Sep. 22	8-10pm	Clark, C
Thu	Sep. 24	8-10pm	Garden Hills, C
Mon	Sep. 28	8-10pm	Centennial, C

\* Daylight Savings Time

**Membership** at the meetings has been dwindling as of late. Granted, the summers are prime vacation time, though the high gas prices are reducing that. Bring a friend to the next meeting or invite a coworker.

The **club listserv** may be going away in its present form. Though the club has not officially been notified at press time, other groups using Prairienet for their lists are being told that this function will cease to operate by the end of the year. Club webmaster Phil Wall has been notified and is looking into other options for the group.

We opened the closet at the June meeting and got out both the **club library** and our assortment of **T-shirts** for purchase. Any club member in good standing can check out books from the library for a month. The T-shirts are \$10 each.

The **2009 calendars** are in! Thanks to Willard Brinegar, they will be available at the meetings for \$10 (members) and \$12 (non-members).

The November, 2008 National Geographic magazine has a cover story called "**Our Vanishing Night.**" You can also check it out online by clicking here: <http://ngm.nationalgeographic.com/2008/11/light-pollution/klinkenborg-text>

**Officer nominations** are now open for the 2009 calendar year. By order of our president, the current officers are nominated again for next year. However, nominations stay open until the November club meeting. Voting will occur at this meeting. Duties for the different offices are:

- President = serve as club spokesperson and runs the monthly meetings and officer meetings
- Vice-president = serves in the president's absence and handles club publicity
- Secretary = handles meeting minutes and all club correspondence
- Treasurer = handles accounts payable and receivable, including managing dues, merchandise sales, and magazine subscriptions. There are also some state forms to file annually.

- 5<sup>th</sup> Director = serves on the executive board

For 2009, we currently have the following nominations:

- President = Guy Hampel
- Vice-president = John Stone, Dave Leake
- Secretary = Mike Conron
- Treasurer = Willard Brinegar
- 5<sup>th</sup> Director = Mike Lockwood

**Night Sky Network update** . . . remember that we're a member of this network of astronomy clubs! NSW will send us materials to use at our Skywatches and our meetings, but we have to use the materials and document their use on their web site. See the latest at: [http://nightsky.jpl.nasa.gov/download-view.cfm?Doc\\_ID=300](http://nightsky.jpl.nasa.gov/download-view.cfm?Doc_ID=300)

Note the following **upcoming talks** at the planetarium of interest to club members . . . on Thursday, November 6, the UI Physics Department will host cosmologist Joel Primack and lawyer Nancy Ellen Abrams for a physics colloquium. The couple also wanted to do a public talk and the physics department called the planetarium. The talk is called "The View from the Center of the Universe" on the latest model of our universe, including dark matter and dark energy. The talk is free and first-come, first served. Doors open at 6pm. Also note that Jim Kaler will be the December "World of Science" speaker. His talk is on the treasure in the Milky Way. Kaler's talk is at 7pm with tickets being \$1 at the door.

Put November 10 on your calendar for the premier of a new program on PBS called "**Journey to Palomar.**" The program tells the story of George Ellery Hale, a Chicagoan born in 1868, who went on to build some of the nation's greatest astronomical observatories. Of these, the "big eye" on Mt. Palomar, near San Diego, may be his crowning achievement. The 200 inch primary mirror saw first light in 1948 after traveling to California from New York on a train that never traveled faster than 25 mph! Hale went on to hire a couple of guys named Harlow Shapley and Edwin Hubble, who you may have heard of before! It's a fascinating story that we hope you'll watch.

**Old equipment** . . . in cleaning out the physics lab closets, several items were found that will most probably be tossed in the dumpster unless someone wants them. We found a nice heavy-duty, metal tripod to be used with a Schmidt-Cassegrain telescope. The mounting plate appears to be for a Criterion brand SCT, though it could be adapted for other models. Also, there's a heavy-duty German equatorial head, with counterweights. There is a drive motor but it hasn't been plugged in so we're not sure it works. If you're interested call or email Dave Leake at 351-2567 (days) or [dleake@parkland.edu](mailto:dleake@parkland.edu).

The Staerkel Planetarium continues to raise funds for a full-dome immersive video system to replace their 57 slide projectors. Thanks to Worden-Martin, the Parkland Foundation will be raffling off a **Saturn Sky**, which is a sporty convertible retailing for \$26,000. At press time, raffle ticket information is sketchy. The car will be given away at the Parkland gala this October.

We will need volunteers for the **summer observatory open houses** ("Skywatch"). Even if you can't run the observatory, you can help by staffing some of the telescopes outside or even helping with parking. The weather has been horrible for our spring events – maybe the summer will be different.

See the calendar section, put the Skywatch dates on your calendar, and join us!

Consider taking your **CUAS newsletter** by email only and save the club some money. By your request, we can email you a pdf file monthly instead of spending money on stamps.

TREASURERS REPORT

As of 10/31/08

Assets\*

\$ 4064.96 checking account  
\$ 4064.96 Total Assets

Income\*

\$ 0.00 No income

Expenses\*

\$ 100.00 Parkland College for NASA TV

\*Note: Magazine subscription funds are not reflected in Income and Expense since they are simply sent on to the respective publishers. As of 8/31/08, all received subscription payments have been sent on, so they are not reflected in the Assets category either.

**OBSERVATORY NEWS**

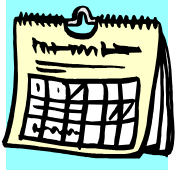


Small projects list . . . . we probably need to **scrape paint** again, both inside and outside. The inside looks pretty bad in the daylight! Thank goodness it's used in the dark! Also, new **tarp** for the 16-inch (no paper or plastic), cooling **fans** in the telescope, and a **vent** for the shed. If you're returning the 8-inch red Dobsonian telescopes to the dome, remember to try to store them horizontally to help protect the mirror coatings. We also need to strip the paint on the inside but, given the dust that would be created, it might be best to wait until the telescope is removed.

We'll also need someone to drain the remaining gasoline out of the mowers in the shed.

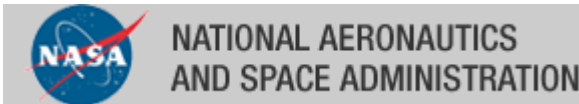
We should be nearing the end of the **mow list**. If you want on the list or removed from the list, contact Dave Leake. Immediately after you mow the lot, contact the next person so they can plan to check the grass height. Allow a couple of hours to complete the job.

- |                     |                     |                    |
|---------------------|---------------------|--------------------|
| 1) Mike Rosenberger | 5) Guy Hampel       | 9) Dick Robrock    |
| 2) Dave Leake       | 6) Willard Brinegar | 10) Bob Rubendunst |
| 3) Mark Prather     | 7) Audrey Ishii     | 11) John Stone     |
| 4) Mike Lockwood    | 8) Wayne James      | 12) Bill Marble    |



## LOOKING AHEAD

November 1	CUAS Family Skywatch	7-9pm	CUAS Observatory
November 7	“World of Science” talk Randy Lloyd, from the UI Extension in Bloomington, will visit to discuss the Twin Groves Wind Farm, north of Farmer City. Admission is \$1.	7pm	Staerkel Planetarium
November 10	“Journey to Palomar” Public Television will premier a new show called “Journey to Palomar.” See your local listings for details or <a href="http://www.pbs.org">www.pbs.org</a> .	7pm	PBS (WILL)
November 13	CUAS Club Meeting	7-8:30pm	Staerkel Planetarium
November 28	“Rites of the Season” The planetarium’s holiday special returns to the dome over Thanksgiving weekend. Hear about our traditions that surround the winter solstice under winter’s star-rich sky.	8pm	Staerkel Planetarium
December 5	“World of Science” talk The planetarium welcomes back Dr. Jim Kaler, professor emeritus in the Astronomy department, for a talk on the Milky Way and the treasure you can find in the galaxy. Admission is \$1 at the door.	7pm	Staerkel Planetarium
December 6	CUAS Family Skywatch This is our last open house for the year.	7-9pm	Observatory
December 11	CUAS Club Meeting	7-8:30pm	Staerkel Planetarium



*Astronomy Club Resources*

### THE CHEMICAL WEATHER REPORT

NASA is about to become a weather forecaster. It has been announced that a new family of satellites will be launched to try and predict the weather more accurately. The satellites will be able to predict when the weather will be unsafe to be outside, especially for people with breathing problems. Here is an excerpt of the article.

“Sunny tomorrow with highs in the mid-70s. There’s going to be some carbon monoxide blowing in from forest fires, and all that sunshine is predicted to bring a surge in ground-level ozone by afternoon.

Old and young people and anyone with lung conditions are advised to stay indoors between 3 and 5 p.m.”

Whoever heard of a weather report like that?

Get used to it. Weather reports of the future are going to tell you a lot more about the atmosphere than just how warm and rainy it is. In the same way that satellite observations of Earth revolutionized basic weather forecasting in the 1970s and 80s, satellite tracking of air pollution is about to revolutionize the forecasting of air quality. Such forecasts could help people plan around high levels of ground-level ozone—a dangerous lung irritant—just as they now plan around bad storms.

Now there are satellites that track such things, but at most there are only two passes in a 24 hour period. And this is not nearly enough times to get an accurate reading of the atmosphere. To read more go to NASA’s website.

-WM-

**CHECK OUT ALL CLUB EVENTS ON THE CUAS HOME PAGE:**

<http://www.prairienet.org/cuas> or <http://www.cuas.org>

“Clear Skies” is published twelve times per year for its membership. [Circulation: 78]

**MEMBERSHIP FORM**

- Enroll me as a new member!
- Membership renewal [attach mailing label]
- Change of address only

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Phone # \_\_\_\_\_  
Email address: \_\_\_\_\_

Make all checks payable to:  
“Champaign-Urbana Astronomical Society”

Circle all that apply:

- Basic membership \$15
- Observatory key fee \$10
- Astronomy magazine renewal\* \$34
- Sky & Telescope renewal\* \$33
- Donation \$ \_\_\_\_\_
- Total Enclosed \$ \_\_\_\_\_

\*enclose mailing label

Detach and mail to:  
C.U.A.S. Treasurer  
c/o Staerkel Planetarium/Parkland College  
2400 West Bradley Avenue  
Champaign, IL 61821

The Champaign-Urbana Astronomical Society is an affiliate group of the **Champaign Park District.**

<http://www.champaignparkdistrict.com>

**William M. Staerkel Planetarium** has public shows on Friday evenings in August. Call 217/351-2446 for more information.

<http://www.parkland.edu/coned/pla>





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C/O William M. Staerkel Planetarium  
Parkland College  
2400 West Bradley Avenue  
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