

"CLEAR SKIES"



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

Celebrating our 20th Anniversary!!

September, 2006

PRESIDENT'S MESSAGE

August has flown by, and we are coming into the month of September, which is statistically the best month for observing in our area. I encourage you to get out and enjoy the warm nights before winter and cloudiness set in. It's also star party season, and I'll remind you that registration deadlines are coming up at the beginning of the month for two of the events. Additionally, we've got a joint observing session with the Decatur group coming up at Allerton on September 16th.

Got something astronomy-related to talk about? Please consider doing a talk at a club meeting. If you've got a program you'd like to do, please tell an officer. We're always looking for new topics to cover, but old ones are fine, too. I'd like to encourage a mix of topics from beginning astronomy to more advanced subjects. Please let us know your ideas.

I'd like to thank all those who have participated thus far in public observing events this year. These are important in growing our public image and increasing our membership. I personally believe that many of those in our area that are interested in astronomy and related topics may not even know that our club exists, and we need to change that. It would benefit both the community and our club, and it's really our duty. I hope that in the future, as our skill at organizing and advertising these events grows, we can attract larger crowds and more potential members, and show the public what stargazing is all about. The show is free, every clear night.

Lastly, thanks to Bill Marble for taking up the newsletter duties. If anyone would like to help out, please let Bill or an officer know. We encourage member submissions for short articles to be published in the newsletter, so if you have something to share, let us know!



CUAS DIRECTORY:

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Jeff Bryant, Secretary	840-5251
Phil Wall, Treasurer	352-5442
Dave Leake, 5 th Director	359-6644
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Chris Pond, Webmaster	352-5426
Bill Marble, Newsletter Ed.	359-6407
Cell phone	621-7882
Jameel Jones, CPD	398-2550

LOOKING UP THIS MONTH

There's You may have heard the rumor that this fall won't be the best for planets some truth to that. As we head into fall, the only planet within easy reach (and the keyword there is "easy") is Jupiter, in the southwest just after sunset. And even Jupiter is getting lower in the sky as the evening twilight ends. As September begins, Jupiter sets at 10pm CDT. This time decreases to 8:30pm by the end of the month. Check out the crescent Moon as it passes beneath Jupiter on the evenings of the 25th and 26th. You might also notice the star that a mere degree to the lower right of Jupiter. This is Zubenelgenubi, a wide binocular double star.

That's about it for the evening sky, though, technically you can see Mercury at the end of the month in the west-northwest. But it's really low! Mercury passes behind the Sun on the 1st and moves into the evening sky. Though Mercury resides in the evening sky until the beginning of November, it doesn't get very high. Greatest separation from the Sun occurs next month . . . but even then, it's nothing to write home about. Technically, Mars is still in the evening sky, but it sets about 30 minutes after the Sun, so forget it. This is in contrast to the emails which continue to go around the internet saying how Mars will be the closest in recorded history and the size of a Full Moon!! First of all, the closeness occurred in 2003 and it was NEVER this large! You can't believe

everything you read on the internet . . . unless of course you're reading this newsletter via email! If we swing into the morning sky, we should mention the planet Uranus, which reaches opposition on September 4. So Uranus rises as the Sun sets and is a bit more than a degree east of the star Lambda Aquarii.

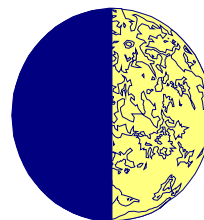
Saturn now rises at just before 4am just about due east. The Moon will be just to the lower left of Saturn on the 19th. A bit lower is the star Regulus, and much lower is Venus. Venus is very bright right now but rising less than an hour before sunrise. So it's also low. See what I mean about these planets? Maybe use charts you can see online at skyandtelescope.com to make an attempt at Neptune (opposition last month) or Pluto.

And speaking of not seeing things (?), we'll have an annular eclipse of the Sun on the 22nd and we won't be able to see that either. The Moon's shadow clips French Guyana far to the south of here and then heads into the Atlantic Ocean, never to touch land again! Get your cruise tickets!

About the only thing we can count on is the fall equinox that occurs at 11:03am CDT on September 22. That means that the Sun will be right in the middle of your windshield if you're driving eastward to work in the morning. Man, this column was just a bummer this month, wasn't it?

Moon Phases:

1 st Quarter	September 30	October 29
Full	September 7	October 6
3 rd Quarter	September 14	October 13
New	September 22	October 22



CUAS NEWS

For sale: 10" F/6.8 and 10" F/5.5 truss-tube Newtonians, both built by me, with primary mirrors made by me. The F/6.8 is plate glass and about 1/15th wave, and the Pyrex F/5.5 is roughly 1/30th wave. They are not inexpensive, but if you're interested in a serious, high-quality telescope that will provide the best of planetary views, please give me a call (398-9778) or talk to me at a meeting. The F/5.5 is the brother to my 10" F/8.8, featured in the March S&T. Both scopes can be seen on my web site (<http://bi-staff.beckman.uiuc.edu/~melockwo/index.html>) under "Telescopes". I am willing to customize the f/6.8 a bit. Why am I selling them? Because I have too many telescopes! - Mike Lockwood.

Fall Star parties:

- ❑ Prairie Skies <http://www.prairieskies.org/> September 28-October 1 (Pre-reg deadline: Sept. 2) Camp Shaw-Waw-Nas-See 4H campground, northwest of Kankakee
 - ❑ Astrofest <http://www.chicagoastro.org/af/index.html> September 21-26 (Pre-reg deadline: Sept 1) Vana Farm, west of Kankakee.
 - ❑ Illinois Dark Skies <http://www.sas-sky.org/main.html> September 21-24 (Pre-reg deadline: ?) Panther Creek Wildlife Area north of Springfield.
- Nice list of others: <http://www.slasonline.org/starparties.html>

Congratulations to Dale Hirstein for winning the drawing held at the August meeting. The drawing for those who submitted surveys by the deadline was for a one-year's subscription to Sky & Telescope magazine. Dale, contact our treasurer if he hasn't contacted you already!

Survey results out of 68 surveys mailed in August, 20 were returned. Of those 20, 19 own a telescope. Tossing out the extremes, the average member (who participated in the survey) had been in the club 4.8 years. The reason for a lack of participation was attributed mostly to either a lack of time or distance. We have several members outside of Champaign County. In the "the club should do more . . ." category, the #1 answer (11 responses) was more in-town observing, followed by more out-of-town observing (9), talks with featured speakers (8), then organized field trips and social activities. There was a suggestion to meet somewhere after the meetings (Village Inn?) for more social activity. Other suggestions: workshops for members, trips to Yerkes or other star parties, and more recruiting and promotions. Comments regarding the newsletter were positive with several pleas for more input from the membership (personal stories, observing reports, etc). Of the 20 responses, 15 said that an online-only newsletter would be fine but the results were nearly split between having it emailed as a pdf file (9) to having a link on a web page (6). More graphics and photos were requested, too. One responses said the club needs long-term goals and plans to reach those goals.

The CUAS officers approved the purchase of 2007 Astronomy magazine calendars. They'll be available at the meetings on a first come, first served basis.

There was also a discussion on fundraising for Prairienet. Prairienet hosts our web site and our cuas-l listserv. The fundraising project was for the list. It was approved by the membership at the August

meeting to have the club donate \$1 per member (or \$68) to Prairienet. If you're on our list and want to donate more, go to www.prairienet.org/lists for information and an online pledge form.

A publicity list has been created to assist the vice-president in publicizing club events. Radio and television stations plus newspaper contacts are on the list. Our two main TV stations do all their calendar entries online now.

Mike Lockwood and his Tuesday night ATM group completed the refurbishment of one of the two 6-inch Criterion telescopes. The suggested price (approved at the August meeting) was \$350. A club member has expressed interest in this. Mike Rosenberger has the other donated 6-inch scope in his tool shed.

Meadowbrook Park Report Seven telescopes and ten members entertained about 30 people at Meadowbrook Park in late July. Everyone in attendance (who was at the meeting) thought it was a good night, though the fog and humidity were less than desirable. This is a good observing spot, minus the parking lot lights. Speaking of, have you noticed Parkland's new full cut-off fixtures on the drive around the college? The Skywatch in July was excellent as well as we welcomed Brian Maple from Decatur and a member from the Brevard Astronomical Society in Florida.

We could use a program for our September meeting – anyone interested? We will try to get former UIAS member Ed Ting back for our October meeting and John Stone will discuss sky brightness in November.

Former newsletter editor, Dave Leake, now has a weekly "Prairie Skies" column in every Monday's issue of the Champaign News-Gazette. He'll be able to plug our open houses in the column.

Treasurer's Report:

Income:

\$2221.79 - checkbook balance as of Aug 21, 2006

111.00 - petty cash envelope as of Aug 21, 2006

42.50 - cash and checks awaiting deposit

\$2364.29 - Total assets

Income past 60 days

\$ 7.50 - 1/2 new membership (prorated for 1/2 year)

15.00 - 1 new membership

10.00 - 1 key fee

10.00 - 1 calendar sale to member

\$ 42.50 - Total income

Outgo past 60 days

\$ 24.96 - 64 stamps for pre-addressed surveys

64.00 - CUAS donation to Prairienet for mailing list

87.75 - 225 units of 39-cent postage reimbursement to Champaign Park

District (April through August 2006)

\$ 158.64 - Kalmbach 25-calendar invoice (\$161.88 discounted 2 percent for

sending payment back within 5 days)

\$ 335.35 - Total outgo

by Philip Wall CUAS Treasurer 2006

Bill Marble, who has been in the club for about one year, has volunteered to try and do the newsletter. I will give it the old college try, but don't expect too much the first one.

OBSERVATORY NEWS!

Due to the rodents in the dome, we need a new tarp for the telescope. The cloth tarp has been chewed through! The purpose of the tarp is to protect the telescope just in case the roof leaks a bit and when the dome is opened. We could also use some poison for the below the dome.



September 30	CUAS Family Skywatch	8-10:30pm	Observatory
This is our public open house for the month and we could use a few volunteers. The observatory is southwest of Champaign. Take I-57 south to the Monticello exit. Go west 1.4 miles to county road 700E. Turn left (south) here and the dome is 0.8 miles down this road on your left. Weather permitting.			
October 12	CUAS Club meeting	7-8:30pm	Staerkel Planetarium
October 21	New Moon Observing	7-?	Observatory
October 28	CUAS Family Skywatch	7-10pm	Observatory

CHECK OUT ALL CLUB EVENTS ON THE CUAS HOME PAGE:

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



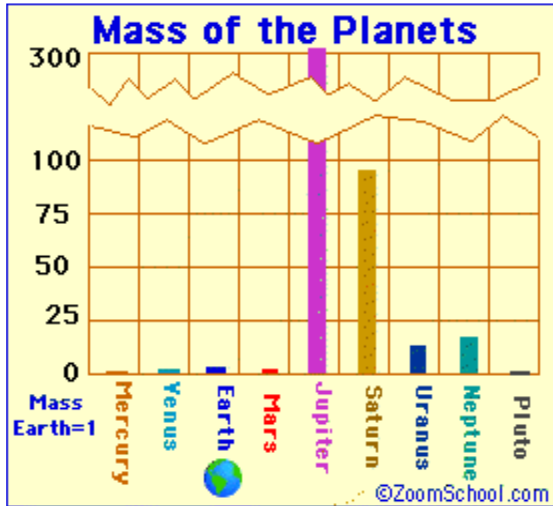
**OUR SOLAR SYSTEM
HOW MUCH DO WE KNOW?**

- Our solar system consists of nine planets, possibly soon to be twelve. The inner planets are: Mercury, Venus, Earth, and Mars. They are relatively small, composed mostly of rock, and have few or no moons. The outer planets include: Jupiter, Saturn, Uranus, Neptune, and Pluto. They are mostly huge, mostly gaseous, ringed, and have many moons (again, the exception is Pluto, which is small, rocky, and has one large moon plus two tiny ones).

But just how much do you know about each planet? For instance, did you know Jupiter is by far the most massive? See chart next page.

The planet with the strongest gravitational attraction at its surface is Jupiter. Although Saturn, Uranus, and Neptune are also very massive planets, their gravitational forces are about the same as Earth. This is because the gravitational force a planet exerts upon an object at the planet's surface is proportional to its mass and to the inverse of the planet's radius squared.

For more information go to WWW.EnchantedLearning.com



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 |
| <i>Astronomy</i> magazine renewal* | \$34 |
| <i>Sky & Telescope</i> 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

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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://wupiter.is.the.largest.and.ww.parkland.edu/coned/pla>



**Champaign-Urbana Astronomical Society
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