



OBSERVATIONS

A MONTHLY PUBLICATION OF THE
CHESTER COUNTY ASTRONOMICAL SOCIETY



★President: Edwin Lurcott

★Treasurer: Pete LaFrance

JUNE 1997

(VOLUME 5, NO. 6)

★Vice President: Kathy Buczynski

★Secretary: William O'Hara

CCAS June Meeting & Observing Session

DATE: **Friday June 13, 1997**

RAIN DATE: Saturday June 15, 1997
(regardless of weather)

TIME: 8:15 p.m. EDT

PLACE: **Brandywine Valley Assoc.**
(BVA)

LOCATION: 1760 Unionville-Wawaset Rd.
(PA Route 842)
West Chester, PA (see map)

Special Note: At the May meeting, Society members voted to combine the monthly meeting and the monthly observing session in June, July, and August. These will all be held on the grounds of the Brandywine Valley Association, on PA Route 842 west of West Chester. The meeting will be held in the field where we observe (Skytop). That means that if the weather is bad both days, the June meeting and observing session is cancelled.

At the June meeting, the Society officers for the coming year will be installed in office. Frank Angelini will deliver part 2 of his presentation on CCD Imaging. If it's clear, this will include a demonstration "in the field". Ed Lurcott will do the month's constellation presentation on Ophiuchus.

At the Society's observing sessions, there will be help available to set up and use your telescopes. All members and the public are invited whether they have a telescope or not. Telescope owners are always glad to share the view through their 'scope. Mars is still visible in the evening hours, and there's plenty of galaxies out there to explore in the Virgo Supercluster. And of course, the Moon will be well placed for high-powered observation. Don't miss it!



A Big Thank You to Hugh Harber

On Saturday May 24, 1997 Ed Lurcott attended a retirement party for Professor Hugh Harber of West Chester University. Hugh retired from teaching this year, and Ed presented a Certificate of Appreciation to Hugh on behalf of the Society. Hugh was one of the founders of the Society, and we want to thank him for "his inspiration, encouragement, guidance and leadership during the formative period of the Chester County Astronomical Society" as well as "his continuing efforts as a liaison between the University and the Society". To recognize Hugh's work the Society will continue his membership as a Life-time Honorary Member of the Chester County Astronomical Society.



Professor Harber Wins National Award

Professor Harber was recently honored for his innovative efforts to get students at the high school and junior high school levels more interested in astronomy and space science. Hugh received the National Congress Crown Circle Award for Aerospace Education Leadership. He joins an elite group of 87 other recipients, including Chuck Yeagar.

For over three years now Hugh has held classes for junior and senior high school teachers showing them how to incorporate aerospace topics into regular courses such as math and science. This is done by using examples from space science as word problems in the math and science classes.

We are very pleased to hear that Professor Harber has received such recognition for his efforts. We are proud to include him as a member of our Society.



Summer Solstice Party: June 20

On Friday June 20 there will be a Summer Solstice Party held by the Brandywine Valley Association. CCAS members have been invited to attend and bring their telescopes for a stargazing party as part of the celebration. The event starts at dusk. You can arrive earlier and bring a picnic supper to eat there. Admission is \$4.00 per person. Storyteller Clem Bowen will tell original stories and folktales from around the world, using traditional and handmade instruments. Weather permitting, there will be a bonfire at Skytop (bet you didn't know that was the name of the place we hold our observing sessions; I didn't either).

Summer Solstice is when the Sun reaches the northernmost point in its annual path in our sky. This occurs at 4:20 a.m. EDT on Saturday June 21, 1997. This event marks the first day of summer in the Northern Hemisphere, and the first day of winter in the Southern Hemisphere.



Summer CCAS Schedule

The next meeting and observing session will be held on Friday July 11, with a cloud date of Saturday July 12, at the BVA.

The August meeting and observing session will be on Friday August 1, with a cloud date of Saturday August 2, at the BVA.

Remember, if the weather is bad on both days, there will be no meeting or observing session that month.



Reminder: CCAS Membership Survey

The survey has been extended for another month, so if you have not yet filled yours out and turned it in, do so this month. You can turn it in to Ed Lurcott at the June Society meeting, or mail it to Ed at:

Ed Lurcott
1384 Station Place
West Chester, PA 19380



Report on West Goshen Star Party

On Friday May 16 CCAS and West Goshen Township held a public star party at West Goshen Park. Over 100 people attended. The Society wishes to thank members Kathy Buczynski, Pete LaFrance, Ed Lurcott, and Frank Angelini for making this event a success.



May CCAS Meeting

The Election Committee conducted the election of officers for the coming year, and announced the results. Ed Lurcott, Pete LaFrance, and Bill O'Hara were all re-elected to their offices for another year. Kathy Buczynski was elected Vice-President in the only contested race.

Dr. Emil Volcheck of the Mt. Cuba Observatory gave us "A Cosmology Update." Matt Patzek, a student at St. Joseph's School in Coatesville, talked to us about the constellation Centaurus. This presentation was re-scheduled from our April meeting due to illness.

During the week after the meeting, Dr. Volcheck e-mailed me a correction on something he had said during his cosmology talk. When asked which type object showed the greatest red-shift, Emil said the quasars. This was true at the time. Then Emil received the May 9th issue of *Science* magazine, which contained a report on some recent measurements on a very distant galaxy. This measurement indicated a red-shift of 4.92, greater (and thus more distant) than the greatest quasar red-shifts (4.89). So, as one astrophysicist was quoted, "Galaxies are leading over quasars in the cosmic horserace for the first time in 20-some years!"

Until now, galaxies thought to be this distant had not been bright enough to get a good spectrum (and red-shift measurement) on them. In this case, the light of the galaxy was gravitationally lensed by a massive foreground object, concentrating enough light to get the spectra needed for the red-shift measurement.



CCAS Membership List

We are in the process of updating the Society mailing list, and printing copies of it for distribution to Society members only. If you do **not** want your address and/or phone number printed in the Society directory, please contact Ed Lurcott at 436-0387. This month will be the last chance to let Ed know; next month the Directory will go to press.

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June's Skies

Moon Phases

New Moon	6/05
First Quarter	6/13
Full Moon	6/20
Last Quarter	6/27

The Planets

Mercury is in the morning sky in early June, but will be very tough to spot.

Venus is low in our evening sky this month and easy to spot due to its brightness, but it will not get high enough above the horizon for good telescopic viewing.

Mars is easy to spot in the evening sky, a bright orange or red "star" high in the southwest at dusk.

Jupiter rises around 1 a.m. on June 1, and is rising by about 11 p.m. by the end of the month. See below for some special notes on observing Jupiter this month.

Saturn is rising in the morning sky but is not yet high enough above the horizon before dawn for any good telescopic views.

Uranus is in the morning sky, in Capricornus, a bit west of Jupiter. By dawn it is pretty well placed for viewing.

Neptune is in the morning sky, in Capricornus, near Uranus. By dawn it too is well placed for viewing.

Pluto is on the border between Ophiuchus and Scorpius, and high in the southeast by late evening. You need a 8" or 10" telescope, good detailed star charts, and patience to find it.

Jupiter's Moons in June

In the June 1997 issue of *Sky & Telescope*, there is an article about some interesting events occurring this year for the moons of Jupiter. Every six years, the plane of the orbits of the four largest moons turns edge-on to Earth and the Sun. What this means is that from Earth we can

see these moons eclipse and occult (pass in front of) each other. What you can see of an occultation, even in small telescopes and binoculars, is two moons getting ever "closer together", and "merging" as the one disappears behind the other. For an eclipse, you can see one moon's apparent brightness dip by a noticeable amount as it passes through the shadow cast by another moon. There are 5 events listed for June, that occur when Jupiter is in the nighttime skies for us in North America. The three best appear to be on June 12, 25, and 30. On 6/12 from 1:39 to 1:42 a.m. EDT, Io will eclipse Europa, with Europa's brightness dropping by about 78%. On 6/25 from 11:16 to 11:19 p.m. EDT, Europa will eclipse Io, with Io's brightness dropping by about 64%. And on 6/30 from 1:35 to 1:44 a.m. EDT, Callisto will eclipse Europa, with Europa's brightness dropping by about 55%. There are more events like these in July, August, and September.

July 4, 1997: Mars Sojourner Lands

Looking ahead to July, don't forget that on July 4th, the Mars Sojourner spacecraft is scheduled to land on Mars. This spacecraft is the one that has a "base station" part and a "rover" part. The rover (Sojourner) will be driven around the base station by semi-remote control from Earth. Keep your fingers crossed that all goes well!

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Contributing to Observations

Contributions of articles relating to astronomy and space exploration are always welcome. If you have a computer, and an Internet connection, you can attach the file to an email message and send it to the editor at Jim.Anderson@hbc.com

Or mail the contribution, typed or handwritten, to:

Jim Anderson
1086 W. King Road Apt. I312
Malvern, PA 19355

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Sky & Telescope Magazine Group Rates

Subscriptions to this excellent periodical are available through the CCAS at \$27 per year, about half the newsstand price, and also cheaper than individual subscriptions! Make out a check to the Chester County Astronomical Society, note that it's for *Sky & Telescope*, and mail to Pete LaFrance. Or you can bring it to the next Society meeting and give it to Pete there. Buying a

subscription this way also gets you a 10% discount on other Sky Publishing merchandise.



Membership Renewals

Check the date printed on the address label of this issue of *Observations*; "exp." appears in front of it, just after your name. If you are due to renew, you may send your renewal check made out to our Treasurer, Pete LaFrance. Mail to:

Pete LaFrance
413 Church Rd.
Avondale, PA 19311



CCAS Membership Information

The present membership rates are as follows:

- REGULAR MEMBER**.....\$20/year
- SENIOR MEMBER**.....\$10/year
- STUDENT MEMBER**.....\$ 5/year
- JUNIOR MEMBER**.....\$ 5/year
- FAMILY MEMBER**.....\$ 30/year

For further information on membership or society activities you may call:

- President:** Edwin Lurcott (610) 436-0387
- Vice Pres:** Kathy Buczynski (610) 436-0821
- Treasurer:** Pete LaFrance (610) 268-2616
- Secretary:** William O'Hara (610) 696-1422
- Program:** Kathy Buczynski (610) 436-0821
- ALCor and Newsletter:** Jim Anderson (610) 993-0261



