



OBSERVATIONS

A MONTHLY PUBLICATION OF THE
CHESTER COUNTY ASTRONOMICAL SOCIETY



★President: Edwin Lurcott
★Treasurer: Pete LaFrance

DECEMBER 1997
(VOLUME 5, NO. 12)

★Vice President: Kathy Buczynski
★Secretary: William O'Hara

CCAS December Meeting

DATE: **Tuesday December 9, 1997**
TIME: 7:30 p.m. EST
PLACE: Department of Geology and
Astronomy Lecture Room
(Room 113 - Boucher Building)
West Chester University
LOCATION: South Church Street
West Chester, PA (see map)

Parking is available behind Sykes Student Center on the south side of Rosedale Avenue, and behind the Bull Center at the corner of Rosedale Avenue and South High Street.

The featured presentation this month will be a combined audio and video program entitled *The Story of the Universe*. Mike Turco purchased a copy of this fascinating program earlier this year at the Mount Palomar Observatory, and will be sharing it with us. Thanks Mike! See ya all there; don't be late, seats may be scarce!



CCAS December Observing Session

The next Observing Session will be on Friday December 26, 1997, with a cloud date of Saturday December 27. That's right; the day after Christmas. Bring along all your new telescopes and gizmos and impress everyone with how good Santa was to you this year! If the weather is bad both days, there will not be an observing session in December. The session will be held at the Brandywine Valley Association (a map is included). At the observing sessions, there will be help available to set up and use your telescopes. All members are invited whether they have a telescope or not. Telescope owners are always glad to share the view through their `scope. As always, CCAS Observing Sessions are free of charge. Children are always welcome as

long as they are accompanied by an adult. Remember to dress warmly! It gets pretty cold real fast standing around a telescope in the middle of an old pasture in December.



December 19: Winter Solstice Party

The CCAS has been asked to participate in a Winter Solstice Celebration at the Brandywine Valley Association. The Celebration begins at 5:00 p.m., and wraps up around 9:00 p.m. The fee is \$5.00 for non-members. RSVP to 610-793-1090. The program starts with a pot-luck dinner; bring bread or hot soup. Cider, hot spiced wine, and a general good time will be provided. A storyteller will be on hand to spin tales for your entertainment. Our own Roger Taylor will give a "sky tour", with telescope-viewing afterwards. CCAS members should bring their telescopes to help out with this part of the program. A nighttime nature hike will also be available. If the weather is bad, the outdoor portions (skygazing and hiking) will be canceled, but the rest of the program will still take place in the big barn.



Happy Holidays !!

The Executive Committee of the CCAS and the Editorial Staff of *Observations* extends best wishes to all Society members and their families for the upcoming holidays. It's been a good year for the Society and its members. We've added a number of benefits for Society members in 1997: a lending telescope, a lending library, membership in the Astronomical League, just to name a few. We look forward to further growth and learning fun in 1998.



November CCAS Meeting Notes

Gabrielle Rowan gave a good talk on the constellation Aquarius. Kathy also pointed out the many other interesting sights in the constellation.

Jim Anderson gave a talk on constellations that were proposed by different astronomers and mapmakers down through history, constellations which were rejected by the International Astronomical Union in 1922 when the official list of 88 constellations was finalized.

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November Observing Session

The evening of Friday November 21 was cloudy and rainy, so that night was a no-go. The next evening, Saturday November 22, it wasn't raining at least; but it was overcast and foggy. That meant there was no November observing session. Hope we have better luck in December.

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Upcoming Events

January 13, 1998: CCAS Meeting at 7:30 p.m. in Room 113 in the Boucher Building at West Chester University.

February 10, 1998 **7:00 p.m. EST**: The CCAS will get a special "members only" tour of the Sproul Observatory at Swarthmore College. Serious scientific work is carried out at Sproul, home to a 24" refractor. This tour will not be the same as the one given at the regularly scheduled public open house sessions at the observatory. It is a special one they give to astronomy societies. Don't miss it! Mark your calendars now!! This is the usual second Tuesday of the month date for our monthly meeting, **but be sure to remember the early start time!**

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CCAS Lending Library

Our Librarian, Bill O'Hara, has the books in our library all ready for members to borrow. You can drop by Bill's place (call first, of course) to borrow a book. Or you can call Bill before a meeting and ask

him to bring a book to the meeting for you. The complete list of books is too big to include in the newsletter; there will be copies available at CCAS meetings. We will be publishing sections of the list each month, though; part 2 is below. Bill's phone number is 696-1422.

Books in Category 2, "Sun, Sextants, and Eclipses":

201 - *Until the Sun Dies*, Jastrow

202 - *Observing the Sun*, Taylor, 1991

203 - *The Birth and Death of the Sun*, Gamow, 1945

204 - *Celestial Navigation for the Yachtsman*,
Blewitt, 1978

205 - *Your Guide to the Great Solar Eclipse of 1991*,
Rao, 1989

206 - *Sky and Sextant*, Budlong, 1978

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CCAS Lending Telescope

We are pleased to announce that Steve Leiden has volunteered to be Telescope Coordinator. You can make arrangements to borrow the telescope for a month by contacting Steve (296-3793). The 6" f/8 reflector can be borrowed by club members for a month at a time. Many thanks to Steve for helping out as Coordinator.

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AL Observing Programs

One of the benefits of joining the CCAS is that you also become a member of the Astronomical League, a national federation of astronomy clubs. The AL has a series of Observing Awards, and 4 observing clubs based on these awards have been started in the CCAS. These are the Messier Club, the Binocular Messier Club, the Lunar Club, and the Double Star Club. These "clubs" will arrange times for the members working on those awards to get together to share experiences and advice in finding interesting sights in the night sky, and possibly also to observe together. Working on these awards also gives you a plan of observing, so to speak. "What will I look at tonight?" becomes "Which Messier objects are visible tonight that I haven't seen yet?" Packets of

info on the various clubs are available at CCAS meetings. Each club has a volunteer coordinator:

Messier Clubs (both): Bob Hartje (610-325-7285)

Lunar Club: Ed Lurcott (610-436-0387)

Double Star Club: Jim Anderson (610-380-4512)



December's Skies

Moon Phases

First Quarter	12/07
Full Moon	12/14
Last Quarter	12/21
New Moon	12/29

The Planets

Mercury is very low in the evening sky as the month opens. Mercury passes in between the Sun and the Earth on December 17 (inferior conjunction), so around mid-month it will be invisible. By the last week of the year it reappears in the morning sky, not far from Antares.

Venus is in our evening sky in December and easy to spot due to its brightness. It will be the first bright "star" you see in the southwest after sunset. By the end of the month, though, it will be "dropping" rapidly lower every evening as it moves closer to the Sun.

Mars is in the evening sky, an orange or red "star" in the southwest at dusk. It will be near much-brighter Venus all month.

Jupiter is the brightest "star" in the south at dusk, easy to find in the faint constellation Capricornus. Jupiter is the most fascinating planet to study with even the smallest telescopes.

Saturn is in the southeast at dusk in December. The rings are now tilted nicely, about 9° from edge-on. Its largest moon Titan can usually be seen even in telescopes as small as 60mm.

Uranus is a bit west of much-brighter Jupiter.

Neptune is not far from Uranus, but would be very tough to see now because it is dim and because it is now so low in the sky.

Pluto is lost in the Sun's glare for the rest of this year.

December 13: Moon Occults Aldeberan

Saturday December 13 at about 12:15-1:30 a.m. EST
The Moon will pass in front of the first magnitude star Aldeberan, in the constellation Taurus (an occultation). Actually, there will be many occultations of fairly bright stars as the Moon will also occult the Hyades star cluster. Anyone with a video camera may be able to record it. The International Occultation Timing Association has asked for timings. Particulars are in the December 1997 issue of *Sky & Telescope*.

December 13: Geminid Meteor Shower Peaks

The annual Geminid meteor shower peaks on December 13, but the Moon will be Full that same night. That means the Moon's light will "wash out" all the fainter meteors from view. There may be some bright enough to be seen anyway; best viewing is during the early morning hours.

Winter Solstice: December 21 20:07 UT

That's 3:07 p.m. EST. That is the moment when the Sun's apparent motion to the south stops, and reverses to the north. The Winter Solstice is of course also known as the first day of winter, because it will continue to get colder for us in the coming months, even though the Sun is moving back our way.



December Quiz Question

If you could fold a piece of newspaper 50 times, and the paper was 0.003 inches thick to start with, how high would the resulting "pile" of paper be?
First person to call Ed Lurcott (436-0387) with the correct answer wins a prize.



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
19 Bluff Road
Thorndale, PA 19372-1104



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

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Sky & Telescope Magazine Group Rates

Subscriptions to this excellent periodical are available through the CCAS at a reduced price, which is 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.

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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
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Newsletter:	Jim Anderson	(610) 380-4512
Librarian:	William O'Hara	(610) 696-1422

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