

# **OBSERVATIONS**

# A MONTHLY PUBLICATION OF THE **Chester County Astronomical Society**

★*President:* Mike Turco  $\star$ *Treasurer*: Pete LaFrance

MAY 2002 (VOLUME 10, NO. 5)

http://members.tripod.com/~ccas\_2/ccas.html

★*Vice President:* ★ Secretary:



Steve Limeburner

Doug Liberati

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#### **CCAS May Meeting**

DATE:	Tuesday May 14, 2002
TIME:	7:30 p.m. EDT
PLACE:	Department of Geology and
	Astronomy Lecture Room
	(Room 113 – Boucher Building)
	West Chester University
LOCATION:	South Church Street
	West Chester, PA (see map on a later page)

CCAS member Nicholas La Para will discuss "basic optics without math," an explanation of how telescopes work and the different types of telescopes. This is sure to be an interesting and informative talk; don't miss it.

Important Society Business: At the May meeting the Executive Committee would like to discuss and vote on a proposal to increase CCAS dues by \$5.00 per year for each class of membership, to take effect on September 1, 2002. That would make Regular membership dues \$25.00, Seniors \$15.00, Student and Juniors \$10.00, and Family dues \$35.00. The Executive Committee has decided on this increase, the first one in seven years, for several reasons. One is the rising cost of postage and production costs for the monthly newsletter; there have been at least two postal rate increases in the past seven years, and the third takes effect in June 2002. The Society also has a liability insurance policy purchased through the Astronomical League. Purchased in this way, using the "pooling" power of joining with other astronomy clubs across the country, keeps the cost realistic. Still, this year's premium was \$327.00 (up from \$250.00 in 1999). Without some coverage Society officers and members are at liability risk when assisting at events open to the public, such as the popular education classes and the National Astronomy Day exhibits at the Exton Mall, as well as the many "star nights" we do for school, church, and civic groups. We obviously do not want to curtail these activities! At a recent Executive Committee meeting, Treasurer Pete LaFrance pointed out that the "regular account" (income being mainly dues, outgo being mainly postage, paper and envelopes for the newsletter, insurance, and other routine expenses) will be slightly in the red this year, and that luckily the income from the educational classes will allow us to make ends meet. After discussing the situation, the Executive Committee decided that we need to increase the dues.

The Society's Constitution stipulates that the Executive Committee and the members of the Society must approve dues increases. In order for a vote on a dues increase to be official, we need to have a quorum of the membership present at the meeting where the vote is taken. Given the current active membership (meaning dues are paid up) of 68, we need to have at least 17 members present for an official vote (Family memberships count as one vote, in case you're wondering). So please turn out to the May meeting so we can decide this important issue; call your friends who are members and encourage them to attend. Thanks.

#### $\star$ ★ **CCAS May Observing Session**

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The next CCAS Observing Session will be on Friday May 10, 2002 starting at sunset; or earlier, if you can get there earlier. If it's too cloudy on Friday, then the Observing Session will be on Saturday May 11, 2002. At the observing sessions, there will be help available to set up and use your telescopes. If you're having trouble using your telescope, or finding your way around the sky, come on out and get some assistance. All members are invited whether they have a telescope or not. Telescope owners are always glad to share the view through their 'scope. CCAS Observing Sessions are always free of charge. Children are always welcome as long as an adult accompanies them.

A map showing the location of the BVA is included on a later page.

#### ★ ★ **CCAS Beginning Astronomy Class**

The remaining class will be held at 7:00 p.m. on May 21, with the topic being "Telescopes and Binoculars". The class will be held at the Flower and Cook Observatory in Willistown Township. A map is included on a later page.

The power supply inside my PC decided to die, and of course it picked the worst possible time to do so: just when it was time to do the newsletter. Then it took longer than expected to get it fixed correctly. That's why the newsletter is so late this month. Grumble, grumble. I thought these things called computers were supposed to make our lives **easier**...



#### **Newsletter Deadlines**

Issue	Deadline	
June 2002	05/24/2002	
July 2002	06/21/2002	
August 2002	07/26/2002	
September 2002	08/23/2002	
*	* *	-

#### **May Skies**

05/04
05/12
05/19
05/26

#### The Planets

The five "naked eye" planets (Mercury, Venus, Mars, Jupiter, and Saturn) are together in our evening sky as the month begins. By May 10, however, Mercury will no longer be visible, and then you'll have to wait about 20 years before you get another opportunity to see all five at once like this.

Mercury is the planet closest to the horizon (lowest in the sky) in the "lineup of planets" this month. As noted above, it will be gone from the scene by May 10.

Venus is second in line, although after May 5 it will be changing position in the lineup. By month's end it will be getting close to Jupiter. It will, however, continue to be the brightest of the five planets, and the first one to "pop out" of the twilight each night.

Mars follows Venus "up" the chain, although it changes position more slowly than Venus does. It is also the dimmest of the planets in this lineup. Around May 5 through 9 Venus, Mars, and Saturn will be very close together. On May 5 they form a neat little triangle.

Jupiter is still in Gemini, outshining every other star in that part of the night sky (until Venus gets there in late May). Jupiter will be the "highest" of the planets all month (appropriate for the "king of planets").

Saturn is in the west, below Jupiter, at the beginning of the month. In late May it will get too close to the Sun to be seen anymore, so the gathering of planets will be reduced to just three.

Uranus and Neptune are both in Capricornus, and are getting high enough in the morning sky before sunrise to make decent telescopic observations.

Pluto is still in Ophiuchus in 2002, and in May is getting high in the southern sky by sunrise. You'd have to be up pretty late (or early, depending on how you look at it) to catch Pluto.

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<b>Calendar Notes</b>				
June 7/8, 2002		CCAS O	oserving	Session
(Friday/Saturday)		Location:	BVA	
		sunset		

June 7-9, 2002

CCAS Observing Session Location: BVA sunset Mason-Dixon Star Party Spring Valley County Park south of York PA

#### Welcome New Members!

Two people joined the Society during our National Astronomy Day exhibit at the Exton Square Mall on April 20. The CCAS warmly welcomes Bill Ashton of West Chester, and Brain Mahoney of Glenmoore.

Hello and clear skies!

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**CCAS Secretary's Report** 

Meeting of April 9, 2002

By Doug Liberati

Meeting convened at approximately 7:30PM on Tuesday, April 9th. 13 people in attendance. Officers in attendance were Steve Limeburner, Doug Liberati and Pete LaFrance. Mike Turco was absent, so Steve administered the meeting.

Kathy Buczynski reported that the Astronomy class was going well and that she would be doing the next session, on the constellations.

Observing reports on Comet Ikeya-Zhang:

Pete LaFrance reported seeing it as naked eye object from his home;

Steve Limeburner identified it in binoculars and described it as having the appearance of a globular cluster;

Ed Lurcott studied the tail through his telescope.

[As a late addition to this list, Doug Liberati can report seeing it as well, very low in the west, in a new pair of 9X63 binoculars he received for his birthday. It had a fairly welldefined tail, for being so close to the horizon and suffering from turbulent air.]

The mirror for the 8" Newtonian that was donated is back from being re-coated and the telescope is up and running, featuring a new paint job courtesy of Pete LaFrance. However, it needs a new focuser. The current focuser is too long and a new, possibly low profile one, needs to be purchased.

There was a unanimous vote to approve funding for changing the current CCAS website address to www.ccasastro.org and moving to an advertising-free site.

A vote on raising club dues to defray costs for insurance and other items was deferred until a quorum can be gathered.

Jeff Goldader was the speaker.



Kathy Buczynski is looking for another CCAS member who is interested in working on the AL's Messier Award, or the Binocular Messier Award. A "Messier buddy" would be someone interested in those awards who would like to share notes, encouragement, and perhaps observing sessions with someone else. The main idea is to encourage and help each other. If you are interested, please contact Kathy at 610-436-0821 or via e-mail at kbuczynski@aol.com. Thanks.



### Astronomus: 13

## A Journal for Young Astronomers

By Bob Popovich

"Big Deal"

There are so many things about the night sky that speak to us: the familiarity of the star patterns...the excitement of seeing an object for the first time...the allure of the delicate colors...the shapes of galaxies and nebulae...the movement of the planets, both major and minor...the sudden appearance of something new.

But there is another aspect that has a peculiar appeal. Consider for a moment the vast sizes and distances involved in astronomy. Distances and sizes that dwarf us. Distances and sizes that require us to abandon the mile and the kilometer. Distances and sizes that are, well, astronomical.

People are often uncomfortable with the notion of being rendered insignificant. A geocentric universe suited us just fine for centuries. The advent of a heliocentric solar system was a terrible shock, but we got used to it. The discovery of the size of our Milky Way galaxy and that there were galaxies beyond it were concepts that many found difficult to grasp, even if they had to accept it as fact. But what the Hubble Space Telescope has shown us is truly beyond anything we could have imagined.



From our perch on this pale-blue dot, consider how astoundingly large the objects we see truly are. They must be so for we are able to observe them across such incredible distances. And how titanic these distances must be to reduce such enormous objects to a pinpoint in the firmament.

"Big deal", you say? "Absolutely", I reply.

Night after night, season after season, year after year we brave both the bite of bugs and of the winter's cold to observe the objects of the night sky. A person without interest in astronomy (Could such a person exist?) might well ask, "How can you keep looking at the stars night after night? They're pinpoints of light and they all look basically the same. It's no big deal"

Well, how can we? Just why do we?

Must it not be more than merely looking? Observational astronomy just has to be bigger than *looking* or it couldn't call to us as it does. It must engage our mind and our spirit. By drawing in our entire being, it is no longer an activity. It is an *experience*. An experience that might just give us a peek at something a whole lot bigger than what we're looking at.

Observational astronomy is completely opposite the current mindset of "Been there, done that" that many suffer from these days. When we acquire a target, awe takes over as we wonder in a stream of consciousness that leads us in any one of several possible directions...

"There's Arcturus, 37 light years away. It's in our neighborhood...inside the Milky Way. But that's over 200,000,000,000,000 miles! How big is our galaxy if this is a neighbor? It's over 100 times more luminous than the sun. Incredible that a star could be so much brighter than our sun. Why doesn't it flood the night sky with its orange light? How old was I when the light I'm seeing left Arcturus? Hmm...8. Light travels so fast- what a big neighborhood I live in. And between there and here the light traveled in a straight line right to my eyes? Did Einstein ever look at Arcturus while he pondered relativity? But Arcturus is moving at 200 miles per second! How did the light from a moving object travel in a straight line for 37 years? I guess light doesn't always move in a straight line. I could observe Arcturus all my life and never notice it nudge even an inch. What if Arcturus took the place of our sun? I guess we'd be toast..."

We gaze at objects larger and more distant than we can conceive. Yet it does not frustrate-it excites and inspires. The vast scale of the universe draws us repeatedly to look, think and question. Perhaps even understand. A bit.

#### BIG DEAL? YOU BET!

Next Time: Let's Take A Dip

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Cartoon by Nicholas La Para

## **CCAS Information Directory**

#### **CCAS Lending Telescope**

Contact Kathy Buczynski to make arrangements to borrow the Society's lending telescope. CCAS members can borrow the lending telescope for a month at a time; longer if no one else wants to borrow it after you. Kathy's phone number is 610-436-0821.

#### **CCAS Lending Library**

Contact our Librarian, Bill O'Hara, to make arrangements to borrow one of the books in the CCAS lending library. Copies of the catalog are available at CCAS meetings. Bill's phone number is 610-696-1422.

#### 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

jim.anderson@mckesson.com

Or mail the contribution, typed or handwritten, to:

#### Jim Anderson 1249 West Kings Highway Coatesville, PA 19320-1133

#### Get CCAS Newsletters via E-mail

You can receive the monthly newsletter by e-mail. All you need is a PC or Mac with an Internet e-mail connection. To get more information about how this works, send an e-mail request to Jim Anderson, the newsletter editor, at:

jim.anderson@mckesson.com

#### **CCAS A.L. Award Coordinators**

These are the members to contact when you have completed your observing log for the Messier, Binocular Messier, Lunar, or Double Star Awards:

Messier (both): Frank Angelini (610-873-7929)

Lunar: Ed Lurcott (610-436-0387)

Double Star: Jim Anderson (610-857-4751)

#### **CCAS** Purpose

The Chester County Astronomical Society was formed in September 1993, with the cooperation of West Chester University, as a non-profit dedicated organization to the education and enjoyment of astronomy for the general public. The Society holds meetings (with speakers) and observing sessions once a month. Anyone who is interested in astronomy or would like to learn about astronomy is welcome to attend meetings and become a member of the Society. The Society also provides telescopes and expertise for "star nights" for school, scout, and other civic groups.

#### **CCAS Officers**

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

- **President**: Mike Turco (610) 399-3423
- Vice Pres: Steve Limeburner (610) 353-3986
- **Treasurer:** Pete LaFrance (610) 268-2616
- Secretary: Doug Liberati (610) 827-2149
- ALCor and Newsletter: Jim Anderson (610) 857-4751
- Librarian: William O'Hara (610) 696-1422

**Observing:** Ed Lurcott (610) 436-0387

Education: Kathy Buczynski (610) 436-0821



#### **CCAS Membership Information**

The present membership rates are as follows:

<b>REGULAR MEMBER</b>	\$20/year
SENIOR MEMBER	\$10/year
STUDENT MEMBER	\$ 5/year
JUNIOR MEMBER	\$ 5/year
FAMILY MEMBER	\$ 30/year

#### **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 19311-9785

#### Sky & Telescope Magazine Group Rates

Subscriptions to this excellent periodical are available through the CCAS at a reduced price of **\$29.95** which is much less than the newsstand price of **\$54.00**, and also cheaper than individual subscriptions (\$39.95)! 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.

#### **CCAS Website**

Pete LaFrance is the Society's Webmaster. You can check our Website at: http://members.tripod.com/~ccas\_2/ccas.ht ml

Pete welcomes any additions to the site by Society members. The contributions can be of any astronomy subject or object, or can be related to space exploration. The only requirement is that it is your own work; no copying copyrighted material! Give your contributions to Pete LaFrance (610-268-2616) or e-mail them to lafrance@chesco.com



Parking is available behind Sykes Student Center on the south side of Rosedale Avenue (Parking Lot K), and behind the Bull Center at the corner of Rosedale Avenue and South High Street (Parking Lot M). If you arrive early enough, you may be able to get an on-street parking space along South Church Street, or along Rosedale Avenue. You can take the Matlack Street exit from Rt. 202 South; Matlack Street is shown on the map at the lower right corner with Rt. 202 off the map. If approaching West Chester from the south, using Rt. 202 North, you would continue straight on South High Street where Rt. 202 branches off to the right. This would bring you onto the map on South High Street near Parking Lot M, also in the lower right corner.



To get to the Myrick Conservation Center of the Brandywine Valley Association from West Chester, go south on High Street in West Chester past the Courthouse. At the next traffic light, turn right on Miner Street, which is also PA Rt. 842. Follow Rt. 842 for about 6 miles.

To get to the observing site at the BVA property, turn off Route 842 into the parking lot by the office: look for the signs to the office along Route 842. From that parking lot, go up the farm lane to the left; it's about 800 feet or so to the top of the hill. If you arrive after dark, please turn off your headlights and just use parking lights as you come up the hill (so you don't ruin other observers' night vision).