



# OBSERVATIONS



A MONTHLY PUBLICATION OF THE  
CHESTER COUNTY ASTRONOMICAL SOCIETY

★President: Mike Turco  
★Treasurer: Pete LaFrance

**OCTOBER 1998**  
(VOLUME 6, NO. 10)

★Vice President: Kathy Buczynski  
★Secretary: Frank Angelini

[http://members.tripod.com/~ccas\\_2/ccas.html](http://members.tripod.com/~ccas_2/ccas.html)

## CCAS October Meeting

DATE: **Tuesday October 13, 1998**  
TIME: 7:30 p.m. EDST  
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.

Our guest speaker at the October meeting will be Professor Rex Saffer of Villanova University. He will make a presentation on the presence of blue stars, called “blue stragglers,” in globular clusters. Hot young blue straggler stars (BSS) have been observed with the Hubble Space Telescope (HST) in the cores of very old globular star clusters surrounding our Milky Way galaxy. Theory maintains that these stars must be more massive than the hydrogen-burning members of the cluster. These less massive, hydrogen-burning stars are as old as the cluster themselves. The expected lifetimes of more massive stars are far less than the age of the cluster, implying that they must have formed recently. The two most favored theories of BSS formation today involve either the merger of contact binaries, or direct stellar collisions in the crowded cluster core. Dr. Saffer will describe observations made with HST which confirm the high stellar masses (and therefore the young ages), and which also reveal clues to the history of BSS formation and their expected evolution. He will also describe future planned research in this area.

Dr. Saffer is presently Research Assistant Professor in the Department of Astronomy and Astrophysics at Villanova University. He graduated Magna Cum Laude from the University of Utah with a BS in both Mathematics and Physics in 1985, and received his Ph.D. in Astronomy from the University of Arizona in 1991. His varied career includes 10 years in the US Air Force as an aircraft avionics and weapons control systems technician, and five years of postdoctoral research at the Space Telescope Science Institute.

Please mark your calendars, and bring all your interested friends to the October meeting to meet Dr. Saffer and hear about his very interesting work. He is a great speaker with the talent for conveying advanced subject matter to lay audiences, as evidenced by his 1984 Outstanding Teacher Award at the University of Utah. Hope to see you all there!

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## CCAS BIG Telescope Project

The University of Pennsylvania has graciously entrusted the Chester County Astronomical Society with two (yes, two) 20” telescope mirrors. One has a focal length of 90” (f/4.5) and the other is 150” (f/7.5). All we have to do is build a telescope or two around these mirrors, and make them available for viewing by the general public at our Society observing functions. We will be discussing this project at the October meeting. A telescope committee will be overseeing the planning and work involved in such a project. Come to the meeting to find out how you can be part of this exciting endeavor.

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## October Observing Session

The next CCAS Observing Session will be on Friday October 23, 1998 starting at about 8:00 p.m. If it's too cloudy on Friday, then the Observing Session will be on Saturday October 24, 1998. 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. CCAS Observing Sessions are free of charge. Children are always welcome as long as an adult accompanies them. Dress warmly, because it gets cold quickly when you're standing around a telescope in a meadow in late October!

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## CCAS November Meeting

At our November meeting (Nov. 10), our speaker will be Dr. Robert Mentzer. Dr. Mentzer's presentation is entitled "Jupiter's Satellites and the Longitude Problem." Although latitude is relatively easy to measure, determining longitude was a problem until almost 1850. With Dr. Mentzer as our guide, we will follow the story of the use of Jupiter's satellites as a heavenly clock to find longitude. The story begins with a suggestion by Galileo that was reduced to practice by Cassini, and leads to famous American explorers like Lewis and Clark, and Charles Fremont. That's at 7:30 p.m. EST on Nov. 10 in Room 113, Boucher Building, West Chester University. Don't miss it!

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## September Quiz Question

We all know that a light-year is a measure of distance, not time: it is the distance that light travels in one year. Now, a nanosecond is one one-billionth of a second. To the nearest tenth of an inch, how long is one light-nanosecond?

Nobody called with any guesses. I guess we needed a better prize, to make all that math worth your while. The answer is 11.8 inches.

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## President's Message August 31, 1998

We held the final summer meeting/observing session on Friday August 28 at the Flower & Cook Observatory. This was the Chester County Astronomical Society's first official meeting there. What began as a questionable weather evening turned into one of the best observing nights in recent memory. A truly great time was had by all who attended. This was in part because of the access we were given to the 15" refractor and the 28.5" reflector with its CCD imaging capability. As tired as we were, the fascinating views we were getting kept us glued to the eyepiece or computer screen until 2 a.m. Special thanks to Rich Mitchell and his wife for their hospitality, and also to Jeff and Debbie Goldader for taking the time and working with our Society. We are especially grateful that they are allowing us the on-going privilege of meeting at the observatory and viewing with the large telescopes.

Our next confirmed meeting at the Flower & Cook Observatory will be in November, in conjunction with a Star Party for the University of Pennsylvania Office of External Affairs. We'll be searching out meteors and the planets, in addition to the usual autumn sky offerings. Please make plans to be there. Active participation by the members of the CCAS helps maintain the University of Pennsylvania's support for this fine Observatory. Look for details of all the events there in the upcoming issues of this newsletter.

Mike Turco

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## Mid-Atlantic Star Party: October 15-20

This fine star party is held at a Boy Scout Camp in North Carolina. The fee for attending the whole party is \$20.00 per adult, which includes camping and daily admission fees (\$10.00 per adult per day otherwise). Children under 15 are admitted free if accompanied by an adult. Dr. Phillip Ianna will speak about parallax measurements of stars, and the effects of light pollution. Other speakers will talk about: interpreting TV weather reports with astronomical observing in mind; making accessories from wood that will enhance your observing; astrophotography; astrohistory; planetary geology;

Leonid meteor showers; and promoting clubs. There will be vendor tables and swap meets. In your spare time at night, there is very good “dark sky” observing from the campgrounds. Call (919) 362-5194 for more information. On the Web, go to <http://www.bsa.net/masp>

Or send e-mail to: [john@bsa.net](mailto:john@bsa.net)

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### Interesting Web Site

It’s called “Terry’s Hunt of the Month”, and it has a list of what Messier, Herschel, and Herschel II objects are visible each month. Check it out at:

<http://www.flash.net/~tlt284/>

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### Oct. 25: end of Daylight Savings Time

Daylight Savings Time ends at 2:00 a.m. on Sunday October 25, 1998. At 2:00, while you’re out there mesmerized by Saturn, turn your clocks back one hour (“Spring ahead, Fall back”).

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### October’s Skies

#### Moon Phases

Full Moon	10/05
Last Quarter	10/12
New Moon	10/20
First Quarter	10/28

#### The Planets

Mercury is visible in the evening sky during the last two weeks of October. Look with binoculars, low in the sky, about 30 minutes after sunset. It won’t be easy to find.

Venus is behind the Sun this month.

Mars is rising in the morning sky at about 3:00. It’s still too far away (and thus too small) for good telescopic viewing. Wait until next March for Mars.

Jupiter is the brightest “star” in the southeast in the early evening, climbing higher as the night progresses. Jupiter is a fine sight in any size telescope (in binoculars too!)

Saturn is rising in the east as darkness falls, but isn’t high enough for good viewing until late evening. Saturn’s apparent size is now about 20”, the largest it has been in two decades.

Uranus and Neptune are in Capricornus, well placed in the south as darkness falls. The May 1997 issue of *Sky & Telescope* has a finder chart for these two planets.

Pluto is now too close to the Sun to be seen.

### Comet Giacobini-Zinner

This faint telescopic comet will be visible in the southwestern evening sky during October and into November. It will be about magnitude 10.5 on Oct.4, brightening to about 9.2 on November 3.

Coordinates:

Date	R.A.	Dec.
10/04	17h 28.1m	+08d 43m
10/14	17h 55.4m	+04d 40m
10/24	18h 27.9m	+00d 11m
11/03	19h 06.1m	-04d 43m

### Other Observing Notes

Thursday Oct. 8 - Friday Oct. 9: Giacobinid meteor shower; best time to watch is after midnight. This shower is somewhat unpredictable (meaning that there may be a meteor shower this night, and then again, there might not be much of one at all.)

Monday Oct. 19 thru Sunday Oct. 25: Orionid meteor shower; best time to watch is after midnight. This is a much more reliable meteor shower, although it is a weak one (meaning not a lot of meteors, and most are faint.)

Tuesday Nov. 17 – Wednesday Nov. 18: Leonid meteor shower: this is the big one, the one that *may* turn out to be a meteor storm (meaning hundreds, or even thousands, of meteors per hour). This happens roughly every 33 years, and it looks like the chances are good that a storm will happen in 1998 or 1999. It’s not a sure thing, because the characteristics of the “debris tube” are not fully understood yet. BUT if it happens, you WILL be sorry you missed it!!! So start making plans now, and start praying for clear weather that night. The Moon will be nearing New Moon, so the observing conditions will be excellent for seeing meteors, IF it is clear. Getting up early on the morning of Nov. 17 may be a good idea, as well as staying out the night of Nov.17 into the morning of Nov.18.

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## Future Observing Sessions

All at the BVA:

November 20 (21), 1998

December 18 (19), 1998

## Future Meetings

All at Room 113, Boucher Building, WCU:

November 10, 1998

December 8, 1998

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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 [SNY114@aol.com](mailto:SNY114@aol.com)

Or mail the contribution, typed or handwritten, to:

Jim Anderson  
19 Bluff Road  
Thorndale, PA 19372-1104

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## CCAS Website

Pete LaFrance has set up a Web page for the Society on the World Wide Web (Internet). He has included some pictures taken by CCAS members. Check it out at:

[http://members.tripod.com/~ccas\\_2/ccas.html](http://members.tripod.com/~ccas_2/ccas.html)

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).

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## CCAS Lending Telescope

You can make arrangements to borrow the telescope for a month by contacting Steve Leiden (296-3793). The 6" f/8 reflector can be borrowed by club members for a month at a 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. Copies of the catalog will be available at CCAS meetings. Bill's phone number is 696-1422.

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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. Working on these awards also gives you a plan of observing: "What will I look at tonight?" becomes "Which Messier objects are visible tonight that I haven't seen yet?" Each club has a volunteer coordinator:

Messier Clubs (both): Ed Lurcott (610-436-0387)

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

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

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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:** Mike Turco (610) 399-3423

**Vice Pres:** Kathy Buczynski (610) 436-0821

**Treasurer:** Pete LaFrance (610) 268-2616

**Secretary:** Frank Angelini (610) 873-7929

**ALCor and**

**Newsletter:** Jim Anderson (610) 380-4512

**Librarian:** William O'Hara (610) 696-1422

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

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## 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**

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### **WHYY Sky Tour: Oct. 29**

WHYY Radio will have another of its popular “Sky Tour” programs on October 29, from 8:00 – 10:00 p.m. EST. This broadcast will be from somewhere in southern New Jersey. Derek Pitts of the Franklin Institute will host this fascinating live program. WHYY Radio is at 91 on your FM dial.



### **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.

