## OBSERVATIONS

## A MONTHLY PUBLICATION OF THE CHESTER COUNTY ASTRONOMICAL SOCIETY

★President: Edwin Lurcott

**OCTOBER 1994** 

★Treasurer: Steven Lurcott

(VOLUME 2, NO. 10)

★ Vice President: Mike Tucker

★ Secretary: Nancy Armstrong

### **CCAS OCTOBER MEETING**

The October meeting of the Chester County Astronomical Society will be begin at 7:30 PM, October 11, 1994 in the planetarium (room 186), Schmucker Science Center, West Chester University, West Chester, PA. See last page for map of location and parking lots.

Our president, Edwin Lurcott, will give a presentation on "Stellar Classification and the Hertzsprung-Russel Diagram." At times you may have wondered how astronomers learn the things they know about stars that you read about in astronomical articles and magazines. By producing the spectrum from the light of a star and comparing it to spectra produced in laboratories, they can determine many of the elements and conditions existing on the surface of the stars. Ed's talk is merely an introduction to this subject and is not designed to be an in-depth study. This may answer some of those "I wonder how they know that?" questions, and raise some other interesting aspects of astronomy.

Socializing over coffee will follow the presentation. All members and visitors are invited.

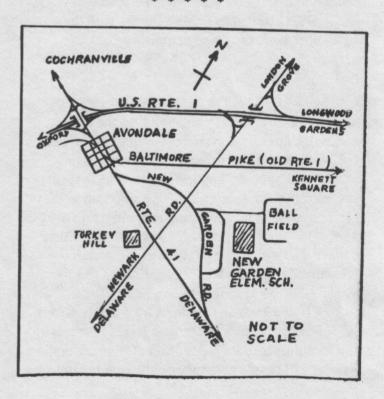
#### SEPTEMBER CCAS MEETING

Mike Tucker, CCAS vice president, spoke at the September meeting and described how he became interested in astronomy and how it has given him opportunities to travel to many exciting places such as, Hawaii, Vermont, and Texas. He described his trip last May to the Texas Star Party and included descriptions of his attempt at photographing the May 10th annular eclipse(clouded out). Slides of this and other events were projected onto the dome ceiling of the planetarium. He also displayed slides of many of the night sky wonders. Some 26 people enjoyed the presentation and his enthusiasm for astronomy.

### TELESCOPE OWNERS NEEDED AT NEW GARDEN ELEM. SCHOOL

The science teachers at the New Garden Elementary School are having "The Night of the Stars" for the 4th grade students and their parents, 7:00-9:00 PM on the evening of Monday, October 10, 1994 starting at sunset. Below is a map showing the location of New Garden School. There may be as many as 100 students and parents. Therefore 10 or 15 telescopes are needed to keep things going smoothly without long lines.

Those bringing telescopes may want to come early (in day light) to set them up. Jupiter, Venus and the Moon may be observed even as the sun sets. The observing site is at the ball field behind the school. Telescope owners are requested to call Pete LaFrance at 269-2616 and let him know you are bringing a telescope. We need all the 'scopes we can get. Won't you help? Give Pete a call.



#### **MEMBERSHIP SURVEY**

Many CCAS members have completed and returned the Member Survey form which was included in last month's "Observations." If you have not yet handed in your completed form, you are requested to do so. As was stated last month the results of this survey will be used to plan subjects for future meetings. Thank you for completing and turning them in to a CCAS officer, or let them know if you need another form.

#### TWO NEW CCAS MEMBERS

Following the September meeting, Dan
Di Francesco and Robert Rivell joined the regular
members of CCAS. We welcome them into the
society.

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#### PROPOSED MEMBERSHIP LIST

It would seem appropriate to publish a list of members showing their addresses and telephone numbers. This would allow members to get together on there own with others who may live nearby for observing or working on equipment.

If any member does not want his or her telephone number listed, please let one of the CCAS officers know. Otherwise it will be listed.

It is planned to publish the list with the November issue of "Observations."

### **CCAS LOGO STATUS**

We now have three entrees to the logo contest. Entrees will be accepted until the end of our November 11th meeting. Those submitting entrees will have an opportunity to finalize them and explain them to the CCAS membership at the December meeting. The members will then vote by a show of hands as to which one of the logos they prefer. The winning logo will then be declared official and used on all CCAS stationary and displayed on all appropriate occasions.

If you have an idea for a logo and have not yet submitted it, now is the time to get it drawn up and turn it over to a CCAS officer for consideration. You never know, yours may be the winning logo.

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#### WINTER STAR PARTY

Notification of the 1995 Winter Star Party has been received from the Southern Cross Astronomical Society, Inc. This major gathering of Amateur and professional astronomers starts on Monday, February 27, 1995 and continues to Saturday, March 4, 1995 and is held on West Summerland Key just 30 miles northeast of Key West, Florida.

It's not too early to plan for this event, It may be that CCAS members interested in going could form a car pool or small caravan and share driving. Since the location is about 24.6 degrees north latitude, many objects in the southern hemisphere are visible which are not visible from Chester County. A variety of accommodations are available from hotels on nearby keys to bunkhouses and camp sites on location for R.V.'s and trailers.

If interested, call Ed Lurcott, 436-0387 for information and registration forms.

### STILL HELP WANTED SECTION

The Chester County Astronomical Society has openings in the following areas:

<u>Public relations</u>-involves sending meeting notices to newspapers and bulletin boards.

Hospitality and refreshments-welcomes people to meetings and arranges for refreshments.

<u>Program chairperson</u>-arranges for speakers and programs at monthly meeting.

Observing host-occasionally offers their backyard for observing sessions.

Since CCAS has grown over 45 members, this presents an opportunity for members to help with the operation of the society. These responsibilities will greatly assist the executive committee. Interested members contact Ed Lurcott at 436-0387.

### FOR SALE

A 4 1/2 "Orion reflecting telescope is offered for sale by CCAS member, Tom Egan. If interested, call Tom at 793-1151.

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# MEMBERS REPORT EVIDENCE OF COMET IMPACTS ON JUPITER

Pete LaFrance was successful in not only observing the impacts of Comet Shoemaker-Levy 9, but in photographing them. His pictures plainly showed two impact sites, which became enlarge into two dark round spots in the south temperate zone. At 8:43 PM, July 31st, he observed these same spots and noticed they had elongated laterally into a dark band in the south temperate zone. The south temperate zone does not normally have any distinct bands. On August 9th, at 8:30 PM, he again observed Jupiter, showing the impact remnants had further elongated in the south temperate zone.

Pete does his observing from his home observatory equipped with an 8-inch Celestron at a magnification of 270.

Another report, from Ed Lurcott, indicated he had made drawings of the surface markings several times prior to the expected date of impact. He thus became familiar with Jupiter's normal appearance. The impact point of fragment A had rotated out of view and that of fragment B was too small to be observed on the evening of July 16th during the CCAS observing session. Unsatisfactory weather prevailed until July 19th, when at 8:40 PM Ed observed and sketched images of Jupiter, showing two prominent impacts, later learned to be from fragment G and L. The size of the large dark marks were judged to be 8,000 to 10,000 miles in diameter (larger than Earth!). He next observed on July 24th at 8:35 PM, and again detected two impacts remnants which were later learned to be from fragment G and R. The G impact appeared circular but the remnant from R looked complex, perhaps starting to elongate.

Ed observed from his backyard "Star Shack" with a 10-inch newtonian telescope designed and built by his father in 1949. Ed used a magnification of 205 and 225 when making these observation.

Below are copies of the sketches made by Pete LaFrance and Ed Lurcott. The spots observed a few days following impact were round, dark and distinct. One week later, the spots had elongated into short bands. This shows how Jupiter has absorbed the impact and is expected to return to its normal appearance.

These observations demonstrate how many of the exciting events are easily observable by modest amateur equipment. Witnessing these events

contributes to our awareness of our own solar system.





JULY 20,1994 0:40 UT. JULY 25,1994 0:35 UT. SKETCHES BY ED LURCOTT





AUG. 1, 1994 0:43 U.T. AUG. 10, 1994 0:30 U.T. SKETCHES BY PETE LA FRANCE

# CHESTER COUNTY ASTRONOMICAL SOCIETY'S PURPOSES

The Chester County Astronomical Society was formed in September, 1993, with the cooperation of West Chester University, as a non-profit organization dedicated 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 meeting and become a member of the society.

### **MEMBERSHIP INFORMATION**

The present membership rates are as follows:

#### **REGULAR MEMBER**

(18 years or older) ......\$20/year SENIOR MEMBER

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(65 years or older) .....\$10/year

STUDENT MEMBER

(full-time college student) ..... \$ 5/year

JUNIOR MEMBER

(under 18 years old) .....\$ 5/year

For further information on membership or society activities you may call Edwin Lurcott (610) 436-0387.

