



Charlotte Amateur Astronomers Club
www.charlotteastromers.org

Next Meeting: Friday, January 18, 2013
Time: 7:00 PM
Place: Myers Park Baptist Church
Address: 1900 Queens Road

PROGRAM DESCRIPTION

Henrietta Swan Leavitt and Cepheid Variables as the Standard Candle

Presented by: Professor Don Olive

Henrietta Leavitt should have won the Nobel Prize in Physics for her ground breaking work at the Harvard University Observatory in the early 1900's. For without her photometry work on Cepheid Variables, Edwin Hubble's and other's discoveries would not have been possible. She helped reshape the way we view the cosmos.



Dr. Don Olive is associate professor of physics and director of the Craven E. Williams observatory at Gardner-Webb University, where he has taught for 6 years. He studied physics and philosophy at Carson-Newman College, then went on to complete a masters and Ph.D. in experimental nuclear physics at Vanderbilt University. He has been involved in a number of research activities on the international level both at Oak Ridge National Laboratory in Tennessee, and at GANIL, the Grand Accelérateur National D'ions Lourds in Caen, France. This work involved observing exotic nuclear resonance phenomena resulting from heavy ion excitation mechanisms. He has published a number of articles and given many talks on the subject.

FROM THE PRESIDENT

This is the time of year for reflecting on the year just past and looking forward to goals for the New Year. CAAC – YOU the members – accomplished much this past year. We had numerous star parties for schools and other organizations, convened a very successful Southern Star astronomy convention, held a very successful college scholarship auction fundraiser, had TV and radio publicity for the last Venus transit (in most of our lifetimes) which resulted in a great public response, and nearly completed all the elements of the construction project for the GHRO. It has been a great year. Shortly, we will be looking toward to identifying the next direction and focus areas for the CAAC – with your help. Stay tuned. In the meantime, I hope you have a chance to enjoy the clear, crisp winter skies and do some observing from the GHRO. See you at the meeting!

UPCOMING EVENTS

It is time to renew your Charlotte Amateur Astronomers Club Membership!

Dues will again, be collected at the January Meeting (1/18).

Please find the fee schedule below:

Annual individual/family member dues - \$35.00
or Students up to 18 years old - \$6.00

Observatory Operator fee - additional \$10.00
Private Observing Pads - additional \$25.00

Make checks payable to "Charlotte Amateur Astronomers Club"

CAAC
c/o Jim Gaiser
8624 Lenten Rose Ct. UNIT 203
Charlotte, NC 28277

CAAC Upcoming Monthly Star Parties:

Saturday, January 12
Saturday, February 9

Monthly star parties are held at the club's **Gayle H. Riggsbee Observatory** in Taxahaw, SC, weather permitting. Contact the Observatory Director, Ken Steiner, for directions to the observatory. All members and their guests are welcome.

Southern Star Astronomy Convention, April 4-7, 2013

<http://charlotteastronomers.org/southernstar>

FROM THE TREASURER

CAAC membership year begins October 1st, and ends on September 30th. Dues for members joining after January 1st are prorated:

- **\$35.00** - Individual and Family
- **\$6.00** - Students, up to 18 years of age
- **\$10.00** - Observatory Access: Allows members unlimited access to and use of the club's observatory facilities and equipment following observatory training/familiarization by the Observatory Director
- **\$25.00** - Private Observatory Pad: Assessed to members that have a private observing pad on CAAC property

Discounted magazine subscriptions can be obtained through the CAAC:

- Sky & Telescope - \$32.95 per year (**savings of \$5**)
- Astronomy - \$34.00 per year (**savings of \$8.95**), or \$60.00 for two years (**savings of \$19.95**)

Make checks payable to CAAC. Jim Gaiser, CAAC Treasurer, will accept them at monthly meetings, or they can be mailed to:

CAAC
c/o Jim Gaiser
8624 Lenten Rose Court #203
Charlotte, NC 28277

FROM THE OBSERVATORY DIRECTOR

This is the time of year for better seeing conditions at the GHRO so enjoy the sky and the new facilities.

We have upgraded the Sky Commanders on the 24 and 16 inch telescopes. There is an expanded catalog as listed below as well as additional menu items including a search and ID function (**see next page**).

Loaner Telescopes:

The club has loner telescopes for members; contact the Observatory Director to borrow these items.



Sky Commander Catalog:

Sky Commander XP4 User's Manual

The following table is a list of catalogs available at the time of writing this manual. Updated catalogs, when available can be found at <http://www.skyenq.com>.

Abbreviation	Catalog Name	Brief Description	Number
Mes	Messier	The famous catalog of Charles Messier	110
NGC	New General Catalog	Entire NGC Catalog	7800
NDS	Named Deep Sky	Various types of deep sky objects by common name	135
NST	Named Star	Stars by common name	142
Dbl	Double Stars	600 best double stars provided by Saguaro Astronomy Club	600
Byr	Bayer Stars	Stars by Greek letter and number	1500
APN	Abell Planetary Nebula	Large but very faint planetary nebula cataloged by George Abell in 1966.	86
Arp	Arp Peculiar Galaxies	Complete catalog of Dr Halton C. Arp	338
Brd	Barnard	Dark nebula	159
Hr4	Herschel 400	Herschel 400 listed by NGC number	400
HIC	Hickson Galaxy Clusters	A catalog of compact galaxy clusters	100
IC	Index Catalog	Entire Index Catalog	5250
Brk	Berkley	Open Clusters	86
Cr	Collinder	Open Clusters	71
Trm	Trumpler	Open Clusters	34
S	Special Objects	User entered coordinates	74
PLN	Planets	All observable planets	8

Sky Commander Menu:

Use the  and  buttons to get to other menu items. There are eight of them.

- Search & ID
- Limit Search Magnitude
- LCD Intensity
- Favorite List On-Off
- Purge Favorite List
- Battery Monitor
- Realign on Object
- Equatorial Table Reset (appears only when sidereal clock is off)

FROM THE SECRETARY

Register with the Night Sky Network

The Night Sky Network (NSN) is a nationwide coalition of amateur astronomy clubs bringing the science, technology, and inspiration of NASA's missions to the general public. As a member club of the NSN, the Charlotte Amateur Astronomers Club has access to a number of resources designed to support our public outreach programs. Use the link below to register:

http://nightsky.jpl.nasa.gov/club-apply.cfm?Club_ID=1468&ApplicantType=Member

CAAC on Facebook

Find the Charlotte Amateur Astronomers Club on Facebook. Navigate to www.facebook.com/CharlotteAstronomers, or use the search feature for "charlotteastronomers". Be sure to 'Like' the page, and you'll receive updates on your wall when new content is shared.



Pre-Monthly Meeting Gathering

Several CAAC members gather at Panera Bread (601 Providence Road, just a few blocks from our meeting place) at 5:30 prior to the monthly meeting. Anyone interested in sharing a meal with them is welcome. If you're new to the club, and would like an introduction to some of the folks that attend, contact Steve Rogish by email (s_rogish@yahoo.com), or see me at the monthly meeting.

Newsletter questions, announcements, change of address - contact Steve Rogish (s_rogish@yahoo.com).

FOR SALE ITEMS

Bring your items for sale to regular club meetings and display them if you wish. To include sale items in the newsletter, please contact Steve Rogish (s_rogish@yahoo.com) Ads will run for up to three months.

CAAC CONTACTS

President	Mark Hoecker	mhoecker@bellsouth.net
Vice President	Robert Carl	rcarl@carolina.rr.com
Secretary	Steve Rogish	s_rogish@yahoo.com
Treasurer	Jim Gaiser	jegaiser@carolina.rr.com
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