

Charlotte Amateur Astronomers Club

www.charlotteastronomers.org

Your Officer Team

President - Mark Hoecker mhoecker@bellsouth.net
Vice President - Jim Gaiser jgaiser@carolina.rr.com
Treasurer - Scott Holland holl8127@bellsouth.net
Secretary - Tom Blevins gtblevins@att.net
Observatory Director - Ken Steiner ken@steiner4.com

Public Outreach - Rob Carl rcarl@carolina.rr.com
Webmaster - Ralph Oleski planetcd@gmail.com

INSIDE THIS ISSUE

PAGE

Meeting Notes	1
Club information	2-3
What's up this month	3
Lunar Highlights	3
Constellation of the Month	3-6

Next Meeting 7:00 p.m.
May 20, 2011

**MEETING LOCATION:
MASONIC HALL
500 NORTH SHARON AMITY
ROAD**

EAT WITH US: Please plan to join us on Apr. 15th prior to our meeting. If you care to eat with us ahead of time, several members will gather at The IHOP Restaurant in Cotswold Shopping Center on Sharon Amity Road, just south of our meeting place at 5:30 PM the night of the meeting. Won't you join us this time? We'd love to see you.

"The History & Mystery of Our Dark Universe: The Story of Dark Matter"

This month we are privileged to have Dr. Stephen Danford of UNC- Greensboro as our featured speaker. Dr. Danford is the former chair of the Department of Physics and Astronomy. He received his PhD in Astronomy from Yale University.

His professional interests include Horizontal branch stars, Population II abundances and the U.S. Space Program.

Please join us for what will be an interesting and informative talk.

New Members

Observing Activities:

Star Party at GHRO May 28, 2011
weather permitting

Public Outreach

GET LINKED UP!

Please link up with fellow club members by enrolling in the Charlotte Amateur Astronomers Yahoo Group website. The site and enrollment is free. The site allows you to keep up with the activities of fellow club members, post photos and e mails to all group members.

The link is

http://groups.yahoo.com/group/charlotte_astronomers

Hardware Corner

This informal CAAC activity takes place at 6:30 P.M. before our regular monthly meeting. The purpose of this meeting is to make available to all the wide expertise and experience within the club to help with your questions on scope upgrades or modifications, astrophotography, software, or anything astronomy related. Please take advantage of this valuable resource. You've got questions we've got answers.

Observatory Director's Corner

Don't forget the club has loaner telescopes to check out and use for a month at a time. See the Observatory Director Ken Steiner at the meeting or e-mail ken@steiner4.com or call 704-817-8607 to schedule your time with one of the scopes.

Secretary's Notes

Items or announcements from the newsletter? Please e-mail Tom Blevins @ gtblevins@att.net or call me at 704-442-0530. Don't forget to check off your attendance on the members sign in sheet when you pick up your name tag at the meeting. Please notify the Secretary of e-mail address changes or any other changes to your information.

From The Chancellor of the Exchequer: The Financial Report

Unavailable at the time of publication

CAAC Dues & Fees

Annual dues are: \$35.00 for a family or individual. Students up to 18 years of age: \$6.00. Annual dues are prorated based on joining date. See the Treasurer for details.

Optional Fees:

Observatory key fee for members: \$10.00 annually.
Observatory pad fee for members with a concrete pad at the Observatory is \$25.00 annually.

Subscriptions

Discounted magazine subscriptions are available through the club at a reduced rate.

Sky & Telescope: \$32.95 per year
Astronomy: \$34.00 per year or \$60.00 for two years.

Please make checks payable to CAAC and give them to Treasurer Scott Holland at meetings or mail them to:

Scott Holland
500 Ethelyn Ave.
Lowell, NC 28098

Club members can also renew their own subscription to Sky & Telescope via mail, or telephone. Members may mail in their renewal notice with payment or telephone using a credit card. Indicate on the renewal notice that you are a member of CAAC. This is for subscription renewal only. The club Treasurer must still process new subscriptions and annually validate a subscriber's membership in CAAC. Subscriptions to Astronomy both new & renewals cannot be renewed directly by the subscriber and must still be processed through the club Treasurer to obtain the club discounted rate.

Sale Bopp Corner

Please contact me via e-mail at gtblevins@att.net with the details of any item you would like to list for sale.

What's Up Now ?

Leo, Leo Minor, Ursa Major, Canes Venatici, Coma Berenices, Virgo, Corvus, Crater, Hydra, Bootes, Corona Borealis

Just Checking In

Hercules, Serpens Caput
Libra, Lyra, Draco

Lunar Highlights

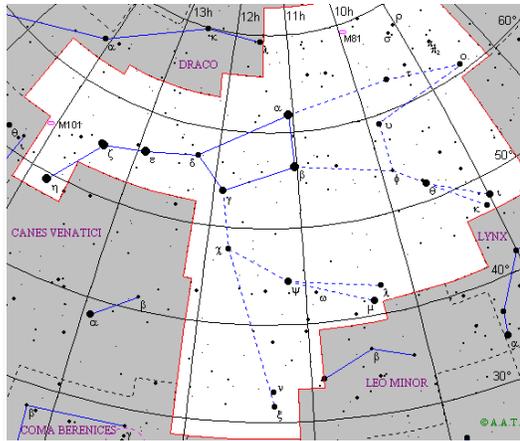
May 16 Full Moon
May 24 Last quarter.
New Moon June 1.
First quarter June 9



Constellation of the Month

Ursa Major

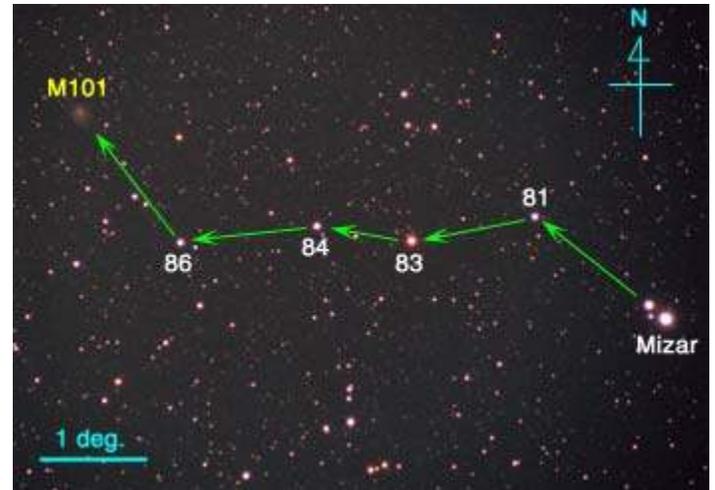
Maybe the most widely recognized constellation in the sky at least the portion of the constellation that makes up the Big Dipper Asterism, The Great Bear is now perfectly placed for observing this month. The constellation holds a treasure trove of celestial delights just waiting to be explored. Plan a trip out to the GHRO to attend our next star party and spend a night under the stars and scope these gems out.



Binocular Highlight

M101

Probably the best way to find M101 is through binoculars. Due to the low surface brightness this galaxy can be a tough target for telescopes. Because of the low surface brightness of the galaxy you can look easily overlook it with a telescope. However under a dark sky the galaxy is an easy find in even 10 X 50 binoculars. The galaxy shows up easily in my 10 X 70 binoculars. There is also a handy roadmap of stars that guide you right to the galaxy. Simply start at Alcor & Mizar and follow the chain of bright stars leading east as shown in the accompanying photo. When you look at this galaxy remember you are looking back in time 15 million light years with just your binoculars.



Novice Challenge

Mizar & Alcor - Zeta Ursae Majoris.

This is a perfect place for beginners and novices to get introduced to multiple star systems. The system is easy to find because it is the middle star in the handle of the Big Dipper. Native Americans used the as well as other cultures used the star as a test of eyesight. If you could see both stars with the naked eye then you have excellent eyesight. With a telescope you will see three stars.

Alcor & Mizar are not a true binary system but are actually a common proper motion pair that move through space together but do not orbit each other. Although the stars are not a true binary system

each of the stars is a spectroscopic binary system. All three components of the system are type A stars and are pure white. Mizar shines at magnitude 2.3, Alcor at magnitude 4.0 and the third also 4.0 magnitude.

Deep Sky Challenge

NGC 3690A & 3690B

Almost smack dab in the middle of the bowl of the Big Dipper is this month's challenge object. This is the interacting galaxy pair NGC 3690 A & B. The pair is located at a distance of 150 million light years and shine at magnitudes 11.2 & 11.9 respectively. Approximately 700 million years ago the galaxies made a close pass. The result is a starburst galaxy. During the last 15 years there have been 6 supernova explosions in this interacting pair.

Get out to the GHRO limber up your scopes and check out this celestial delight.

The co-ordinates for the pair are 11 hrs. 28 min 54 sec. R.A. +58 deg. 31 sec. declination. For NGC 3690A
11hrs. 56 sec R.A. +58 deg. 31 sec. declination.



Credit NASA/ESA

Double Delights

Xi Ursae Majoris.

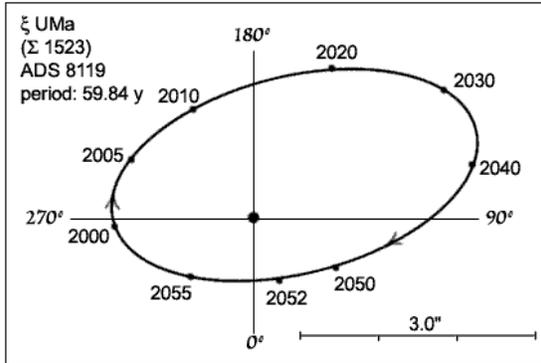
Located in one of the bear's feet Xi was known to Arab astronomers as the first leap of the Gazelle.

Both stars are G0V type stars and are 4.3 & 4.8 magnitude. Can you spot the difference in brightness in your telescope? The current separation is 1.8 arc seconds so this may be a really tough split unless seeing conditions are good.

The double nature of Xi was discovered by our old friend William Herschel on May 2, 1780. Xi has a unique claim to fame. The system was the first system to have the orbital period calculated. The orbital period of the system is 59.84 years

Mercury

The coordinates for the pair are 11 hours 18 min. R.A & +31 degrees 32 seconds Declination.



Xi Ursae Majoris orbit



Starry Night Over the Rhone
Vincent Van Gough