



The Star

Newsletter of the
Mount Cuba Astronomy Group

Vol. 1 Num. 2 October 2012

Program Schedule:

Programs are at 7:30 at
Mt. Cuba Astronomical
Observatory 1610 Hillside Mill
Road, Greenville, DE unless
indicated otherwise.

September 11
Tin Cans and Moon Craters

October 9
Stars and Constellations of Fall
What to look for in the coming
months. Gain an understanding
of the motion of the sky and
how to find your way around
the heavens.

November 13
Brandywine Library
Observing with telescopes

December 11
Stars and Constellations of Winter
Program and Holiday Party

January 8
Guides to the Sky

February 12
Binoculars in Astronomy

March 12
Mapping the Sky

April 9
Stars and Constellations of Spring

May 14
The Moon: Its Origin and Phases

June 11
Stars and Constellations of Spring

Mount Cuba Astronomy Group

The first meeting of the Mt. Cuba Astronomy Group was held September 11 and featured a look at how even the most fundamental calculations on earth can be utilized in determining the basic nature of the universe. True, we weren't calculating orbits at high levels of accuracy, but discussed how to recognize repeating mathematical relationships and apply them to what can be observed.

All of us are very familiar with Pi and its relationship to diameter and circumference, but it never hurts to go back and measure assorted objects possessing a circle somewhere in their design and comparing the diameter to the circumference. Amazing, that with common tape measures, the best we can do is get an average for Pi.

Why go through all this?
When teaching novice

astronomers about motions in the sky, it never hurts to go back to basics, math as the early astronomers might have done it.

Once the relationship of diameter to circumference is established, the distance to the sun, can be used to do simple calculations of orbital speeds for the planets as well as rotational speeds at various latitudes.

There is a book with the title "You can't teach a kid to ride a bike at a seminar". Teaching young and new astronomers the basic math provides the starting point for those who wish to delve into the more complex calculations as they see fit.

This grassroots approach will continue at the October meeting as we explore the stars of Fall and their motion through the cooler and clearer skies of the coming months.

Contact us at:

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hbouchelle@live.com
(302) 983-7830



Above - Dave Groski hosted the inaugural MCAG meeting and discusses his trip to Stellafane

ASTRONOMICAL LEAGUE

K. Lynn King, Astronomical
League Observing Chair

What is the Astronomical League? How does it benefit me as a club member? The Astronomical League is the largest amateur astronomy organization in the world. Its mission statement says it all: "To promote the science of astronomy by fostering astronomical education; by providing incentives for astronomical observation and research; by assisting communication among amateur astronomical societies." Have you ever said: My skies are crappy. Where can I observe? Is there anything I can see? Where do I start? My child is interested. Is there anything for him/her?

I need to be challenged. What's in it for me? The League has something for everyone from a quarterly news letter "The Reflector", books, charts, observing programs for the very new to help you learn the sky to the very experienced who are looking for a challenge. The League has 38 observing programs. There is something for everyone no matter what level. When you complete a program, you are recognized nationally and receive an award!!!! In the coming months, look for featured observing programs.

Mt. Cuba Astronomical Observatory "Introduction to Astronomy" Course Fall 2012

Host: Hank Bouchelle, Ed.D.
Prof. Physics and Astronomy
University of Delaware

The Mount Cuba Astronomy Group is offering a four-meeting *Introduction to Astronomy* course on Wednesdays, October 3 to 24, 7:30 - 9:00 pm in the Mt. Cuba Astronomical Observatory lecture room.

This course is intended for **beginners** and deals with what can be seen in the sky, and where objects may be found. It requires no math or previous knowledge of astronomy. It focuses upon what can be seen with the unaided eye, but will

include telescopic observations as opportunity permits.

The **purposes** of this course are to provide participants with information about the consequences of Earth's motions, positions, and posture; to become acquainted with the meaning of the ecliptic, constellations, and the apparent paths of the Sun, Moon, and planets; to be able to use planispheres, star charts, and other observational aids; and to understand the types and uses of telescopes and binoculars.

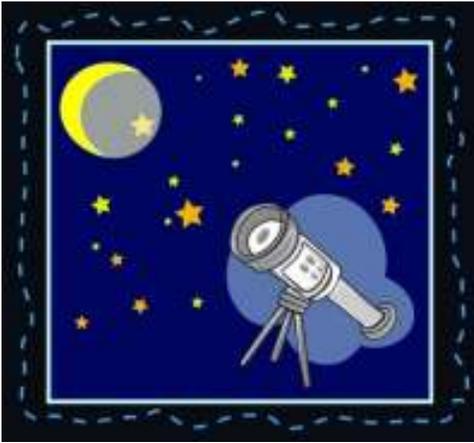
A **syllabus** and more information may be obtained at hbouchelle@live.com. Space is limited to 25, so you may want to make contact before you mail you check.

The course is **open to the public** at a cost of \$40 and free for members of the Mt. Cuba Astronomy Group (see below). Please make checks payable to MCAO (Mt. Cuba Astronomical Observatory) and send to:

Dr. Hank Bouchelle
29D Kings Circle
Newark, DE 19702

Harvest Moon Festival will be held Saturday - Sunday, Oct. 6 & 7, 10 am - 5 pm at Coverdale Farm Preserve, 543 Way Road, Greenville, DE 19807

Solar Observation - contact
klynnking@verizon.net



STARRY-EYED CHALLENGE

The moon is the dominant feature of the night sky. The man (or lady) in the moon has been seen by all mankind as long as we've looked to the heavens. Until the first telescope was turned upward, little was known of the true nature of the moon's surface.

At even minimal power, the man (or lady) in the moon disappears

and is replaced by a myriad of craters, mountains, valleys and "seas. This month's Challenge !!

How many visible craters are there on the moon?

- A. 1000
- B. 6,000
- C. 15,000
- D. 30,000
- E. 50,000

Answer below !

Mt. Cuba Astronomy Group Membership Form

The Mt. Cuba Astronomy Group is a tax-exempt organization dedicated to astronomy education and public outreach. Benefits of membership include:

- Monthly newsletter that includes details about the Group's activities and much astronomical information
- Monthly programs on subjects and topics of astronomical interest
- Free or discounted subscriptions to astronomy-related publications
- Free registration for MCAG workshops and classes
- Mention Mt. Cuba Astronomy Group and receive a 5% discount at Manor Books in New Castle (<http://www.yelp.com/biz/manor-used-books-New Castle>)
- Dues are free until January 2013



Mail to:

Ms. Carolyn Stankiewicz
1001 Woodstream Dr.
Wilmington, DE 19810

Name _____

Name(s) (children, if any, and age): _____

E-mail address: _____

Home address: _____

Phone (optional): _____

Starry-eyed Challenge answer : There are 30,000 craters on the side of the moon that is visible from earth. There are many more small craters we cannot see that are less than ¼ km across.