



The Custer Institute (est. 1927) www.CusterObservatory.org
LONG ISLAND'S OLDEST PUBLIC OBSERVATORY
1115 Main Bayview Road (South of Route 25), P.O. Box 1204, Southold, New York 11971; 631-765-2626

UPCOMING EVENTS: WINTER 2012

More events will be added and details provided about those listed below so please check our website for the latest info <http://www.CusterObservatory.org> Questions? Don't hesitate to contact CusterDonna@yahoo.com or call 631-765-2626.

GENERAL ADMISSION. Minimum suggested donation of \$5 Adults, \$3 Children under 14; FREE for Members. The suggested donation for the specific events listed below includes the cost of General Admission. (Please note that prices may change so please check our website closer to the date.) After the events, remain for refreshments and guided tours of the night sky through Custer's telescopes. The Custer Institute is open every Saturday evening from 7PM until midnight.

IN-SERVICE CREDIT. Letters will be supplied upon request from teachers who attend classes and other educational events.

Sat., Jan. 21, 7:00 PM - midnight SATURDAY EVENING STARGAZING (weather permitting)

The Custer Institute will be open for guided tours of the night sky through the observatory's powerful telescopes. Admission: Suggested donation of \$5 Adults, \$3 Children under 14, Free for Members.

Fri., Jan. 27, 7:00 PM - ? MEMBERS' NIGHT

A Members-Only (and their guests) evening for mingling, observing, enjoying the observatory and its resources. Admission: FREE.

Sat., Jan. 28, 7:00 PM - 9:00 PM LECTURE: "HOW TO BUY AND USE A TELESCOPE"

Is there a telescope gathering dust in the closet because you don't know how to use it? Perhaps you have been using your telescope but it doesn't seem to be working quite right and you're asking yourself: "Is it me or the equipment?" Or maybe you'd like to buy a telescope and want to know what to consider before making the purchase. This lecture and workshop will provide all the answers. You'll learn all you ever wanted to know about telescopes and receive practical information that will help you get set up and observing. After the lecture, there will be an opportunity for you to receive hands-on help from the instructor and Custer's Observatory Staff so bring your equipment with you. Instructor: **Jeff Norwood** is a veteran amateur astronomer, telescope mechanic, & owner of [Camera Concepts](http://www.CameraConcepts.com) in Patchogue. Suggested Donation: \$10 Custer Members; \$15 Non-Members; \$5 Full-time Students. Admission includes stargazing after the event.

Sat., Jan. 28, 9:30 PM - midnight SATURDAY EVENING STARGAZING (weather permitting)

The Custer Institute will be open for guided tours of the night sky through the observatory's powerful telescopes. Admission: Suggested donation of \$5 Adults, \$3 Children under 14, Free for Members and for those attending the earlier lecture.

Sat., Feb. 4, 7:00 PM - midnight SATURDAY EVENING STARGAZING (weather permitting)

The Custer Institute will be open for guided tours of the night sky through the observatory's powerful telescopes. Admission: Suggested donation of \$5 Adults, \$3 Children under 14, Free for Members.

Sat., Feb. 11, 7:00 PM - midnight SATURDAY EVENING STARGAZING (see above; weather permitting)

Sat., Feb. 18, 7:00 PM - midnight SATURDAY EVENING STARGAZING (see above; weather permitting)

Sat., Feb. 25, 7:00 PM - midnight MERCURY APPRECIATION NIGHT (weather permitting)

Feb. 20 to March 12 will be the best chance this year to view Mercury, the planet closest to the Sun. During this period, Mercury will be far enough away from the Sun's glare to be seen after sunset through Custer's powerful telescopes. Other celestial objects will also be viewed this night. Suggested Donation: \$5 Non-Members, \$3 Children, free for Members.

Fri., Feb. 24, 7:00 PM - ? MEMBERS' NIGHT (see above)

Sat., March 3, 7:00 - 8:30 PM LECTURE: "MARS, WATER & THE SEARCH FOR LIFE"

We are in a golden age for the exploration of Mars, with the recent launch of the Curiosity Rover just the latest in a long line of missions to the Red planet. Astronomer Dr. Mike Inglis will discuss the latest findings about Mars and using the latest images and results he will discuss our current knowledge of the planet, and ask, and possibly answer, the big question - whether life ever existed on the Red Planet! **Dr. Mike Inglis** is a Professor of Astrophysics at Suffolk County Community College. He worked on the Wilkinson Microwave Anisotropy Probe (WMAP) project at Princeton University, is on the Advisory Board of [Montauk Observatory](http://www.MontaukObservatory.org) (MO), and is a NASA Solar System Ambassador. He has authored several books on astronomy, including *Astrophysics is Easy* and *Astronomy of the Milky Way, Parts 1 and 2*. Suggested Donation: \$5 Custer Members; \$10 Non-Members; \$5 Full-time Students. Admission includes stargazing after the event.

Sat., March 3, 9:00 PM - midnight MARS IN OPPOSITION & STARGAZING (weather permitting)

Tonight Mars will be at its closest approach to the earth than it will be all year. While it will not look as big as the moon, you'll have a great opportunity to view the fourth planet from the Sun through Custer's powerful telescopes. Other celestial objects will also be viewed this night. Suggested Donation: \$5 Non-Members, \$3 Children, free for Members and for those attending the earlier lecture.

Sat., March 10, 7:00 - 8:30 PM

**LECTURE: "AN INTRODUCTION TO YOUR BRAIN:
HOW WE STUDY IT AND WHAT HAVE WE LEARNED?"**

The human brain is the most complicated thing in the known universe, so studying it presents a formidable challenge. This talk describes how neuroscientists study the brain and the key things we've learned. We now understand that your brain defines who you are; it underlies your awareness, your moods, and your personality. But how do we know this? We have learned that the brain processes information using circuits composed of brain cells. But what does it mean for a brain cell to "process" information? This talk explains how a wide range of experiments, from people to insects, provide answers to these questions. Presenter: **Rob Campbell, Ph.D.**, is a Custer Member and a neuroscientist working at Cold Spring Harbor Lab, NY. Rob is currently studying how flies smell the world around them. Suggested Donation: \$5 Custer Members; \$10 Non-Members; \$5 Full-time Students. Admission includes stargazing after the event.

Sat., March 10, 9:00 PM - midnight SATURDAY EVENING STARGAZING (weather permitting)

The Custer Institute will be open for guided tours of the night sky through the observatory's powerful telescopes. Admission: Suggested donation of \$5 Adults, \$3 Children under 14, Free for Members and for those attending the earlier lecture.

Sat., March 17, 6:00 - 10:00 PM VENUS & JUPITER IN CONJUNCTION (weather permitting)

During the middle of March, these two planets will be bright and viewable in close proximity for four hours after sunset--an exceptionally long period of time (next year, the conjunction will be on May 28 and only last 2 hours per evening). Suggested Donation: \$5 Non-Members, \$3 Children, free for Members.

Sat., March 17, 10:00 PM - midnight SATURDAY EVENING STARGAZING (see above; weather permitting)

Sat., March 24, 7:00 PM - midnight SATURDAY EVENING STARGAZING (see above; weather permitting)

Fri., March 30, 7:00 PM - ? MEMBERS' NIGHT (see above)

Sat., March 31, 7:00 PM - midnight SATURDAY EVENING STARGAZING (see above; weather permitting)

Sat., April 7, 7:00 PM - midnight SATURDAY EVENING STARGAZING (see above; weather permitting)

**Sat., April 14, 7:00 PM - ? MESSIER MARATHON AT CUSTER (weather permitting)
A LECTURE and MARATHON by MARATHON FOUNDER, TOM HOFFELDER**

Messier Marathons are events during which amateur astronomers attempt to observe as many [Messier Objects](#) as possible in one night. In the mid-1700s, French astronomer, Charles Messier, compiled a catalog of deep space objects (galaxies, star clusters, nebulae) that he observed when trying to find comets; there are 110 Messier objects. In 1976, amateur astronomers, Tom Hoffelder and Tom Reiland, created the Messier Marathon. At 7:00 PM, if the skies are clear, Tom Hoffelder will present a lecture about the Messier Marathon and Messier Objects then will lead a Messier Marathon that will last until dawn. Bring your telescope or share views through Custer's. Suggested Donation is: \$5 Members; \$10 Non-Members; \$5 Full-time Students.

Sat., April 21, 7PM - midnight (or later) LYRID METEOR SHOWER PARTY (weather permitting)

Tonight is the peak of this shower, which extends from April 16th through the 25th. On average, 20 meteors per hour emanating from the constellation Lyra may be seen at the peak. Suggested Donation: \$5 Non-Members, \$3 Children, free for Members.

Fri., April 27, 7:00 PM - ? MEMBERS' NIGHT (see above)

Sat., April 28, 7:00 PM - midnight SATURN APPRECIATION NIGHT (weather permitting)

On the 15th of this month, Saturn, the sixth planet from the Sun, was in opposition, meaning that it came as close to the earth as it will all year. Tonight is still a perfect opportunity to view this amazing planet, its rings and moons, as well as other celestial objects. Suggested Donation: \$5 Non-Members, \$3 Children, free for Members.

OTHER UPCOMING CUSTER and/or CELESTIAL EVENTS

Sat., May 5: Moon Appreciation Night at Custer (the night this year when the moon will be closest to the earth)

Mon., June 4: Partial lunar eclipse, viewable from midnight until dawn

Tues., June 5: Partial transit of Venus across the Sun, viewable at sunset

Sat., June 23: Custer's Annual Membership Meeting & Elections

Sat., July 21: Celebration of Amateur Radio: A Mini-Conference at Custer

Sat., July 28: Southern Delta Aquarids Meteor Shower Party at Custer (peak of shower overnight July 28-29)

Sat., Aug. 11: Perseid Meteor Shower Party at Custer (peak of shower overnight Aug. 12-13)

Sat., Aug. 25: Neptune Appreciation Night at Custer (Neptune in opposition on Fri., 8/24)

Fri., Aug. 31: Blue moon (when a full moon occurs twice during one month)

Sat., Oct. 20: Orionid Meteor Shower Party at Custer (peak of shower overnight Oct. 21-22)

Fri., Oct. 19 through Sun., Oct. 21: Custer's 34th Annual Astronomy Jamboree

Sat., Nov. 17: Leonid Meteor Shower Party at Custer (peak of shower overnight Nov. 17-18)

Wed., Nov. 28: Penumbral Lunar Eclipse

Sat., Dec. 1: Jupiter Appreciation Night at Custer (Jupiter in opposition on Mon. Dec. 3)

Sat., Dec. 15: Geminid Meteor Shower Party at Custer (peak of shower overnight Dec. 13-14)

Mon., Dec. 31: New Year's Eve Under the Stars at Custer

The last Friday of every month is Members' Night.

ON-GOING: Custer is open to the public Saturdays, 7PM until midnight for events, stargazing and more (see above for schedule). Staff provide guided tours of the sky via powerful telescopes (weather permitting). Group visits by classes, scouts, and others are welcomed; email CusterDonna@yahoo.com or call 631-765-2626 to schedule.

BENEFITS OF MEMBERSHIP

The Custer Institute is a 501(c)(3) N.Y. State educational nonprofit that operates exclusively on public support (proceeds from events, dues, and small donations); it has no endowment. It is staffed by volunteers dedicated to advancing Custer's educational, cultural and research goals, and its service to the community. In addition to the reward of supporting this unique organization, Members also enjoy the following: Email subscription to our newsletter; library privileges; discounts on lectures, classes and other events; invitations to Members-only events; voting privileges; access to the facilities; special training programs; opportunity to become an Observatory Staff Member. Dues: \$45 Individuals; \$60 Family; 25 Seniors/Students; \$100 Sponsor; \$250 Benefactor; \$500 Patron; \$1000 Corp. Sponsor.