

ASTRAL PROJECTIONS

Volume 20 Issue 12

December 2009

**** **PLEASE NOTE** ****

Meetings are in the Solar Lounge beginning at 7:00 PM. The Solar Lounge is located in the Ocean County College Center building #15 across from the Planetarium. The relocation of the meeting is due to the renovation of the planetarium building.

Highlights from our November 13th meeting.

Meeting Schedule 2009

December 11th 2009 -

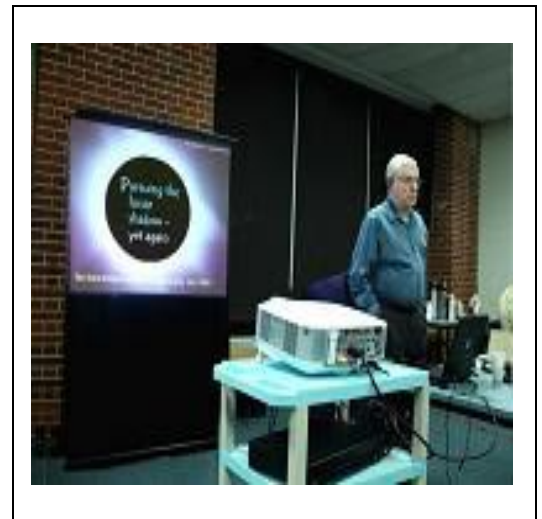
Elections for club Officers (Ballots will be available at the meeting for members to vote) also this is our annual awards meeting.

January 8th 2010 – *ASTRA's Telescope Workshop. If you received a new telescope for Christmas or you have an older telescope you just cannot figure out. Come to our telescope workshop and ASTRA members will be there to help you.*

February 12th 2010 - TBA

At the November meeting, Phil Zollner gave a presentation on his experiences in China and Japan last July. The eclipse of July 22 was the reason for the trip; and, in spite of bad weather at sea on the 22nd, the eclipse experience was memorable (as they always are no matter what hardships or bad luck may happen).

In addition to the eclipse, he presented commentary and images of Shanghai by day and night and equally memorable images of the cities of Hiroshima and Nagasaki. He reminded all to look forward to the first total eclipse to cross the continental US in a quarter century on 21 August 2017."



New ASTRA Hotline

If you do not have access to our website message boards, you can call the ASTRA Hotline 609-971-8493 for the latest information on star parties and other observing plans. If you have a question about the club or astronomy in general leave a message and we'll get back to you.

ASTRA Club Telescopes

A.S.T.R.A. owns two Dobsonian type telescopes of 6 inches and 8 inches in aperture and two refractors one 80mm Celestron w/Altaz mount and one 120mm Orion AstroView w/equatorial mount. After suitable training, club members may borrow these telescopes for a month at a time. Contact John Endreson at: Webmaster@astra-nj.org or call the ASTRA Hotline 609-971-8493 if you are interested in using one of our scopes.

ASTRA Library of Books & DVD's

The following books and DVD's are available to borrow for one month at a time. Request for these items must be made prior to our regular meeting and returned the following meeting. Please e-mail your request for these items to John Endreson webmaster@astra-nj.org or call the ASTRA Hotline 609-971-8493

BOOKS

- 1) **The Far Side of the Moon** by Charles J. Byrne.
- 2) **Night Watch** by Terence Dickinson
- 3) **New Atlas of the Moon** by Serge Brunier (Author), Thierry Legault (Photographer).
- 4) **Encyclopedia of space** by National Geographic
- 5) **The Real Mars** by Michael Hanion
- 6) **Don't Know Much about the Universe** by Kenneth C. Davis's

DVD's

- 1) **Parts 1&2 Understanding the Universe What's New in Astronomy 2003** Taught by: Professor Alex Filippenko. Each part has 8 lectures, 45 minutes per lecture.
- 2) **Parts 1 to 5 Understanding the Universe An Introduction to Astronomy** Taught by: Professor Alex Filippenko each part has 8 lectures, 45 minutes per lecture.
- 3) **COSMOS**
In his "ship of the imagination," Carl Sagan guides us to the farthest reaches of space and takes us back into the history of scientific inquiry in the course of 13 fascinating hours.

For a complete list of books and DVD's, visit our website.

Items for Sale

Telescope for sale: Meade 8" Schmidt-Cassegrain LX200 (f/6.3) with Autostar and hand controller, AC and 18V DC power supply. Accessories include: 9.7mm Super Plössl, 12.4mm Super Plössl, 26mm Super Plössl, Eyepiece holder, T-Adapter, Diagonal Prism, 8x50 mm Viewfinder, AC adapter, eyepiece filter set (x4), Handheld Keypad/Controller, Canon EOS camera adapter. Purchased in 2000. Used exactly twice. All original packaging and documentation. \$1500.00 You pick up from Delran, NJ 08075. If you are interested, send a note to President@astra-nj.org for the e-mail contact information. The person selling the equipment can answer any questions or accept an offer.

Meade Super-wide 13.8mm 1 1/4 in. eyepiece for sale.

This is an original Japanese made series 4000 eyepiece with a 70 degree field. Excellent condition. Originally \$125, sell for \$50. Contact: Phil Zollner at 732-905-0889 or pazap@juno.com

ASTRA-WEAR: For Embroidered and/or Printed items With the ASTRA Logo



You can see some samples at ASTRA meetings. To order by mail: Shelter Cove Embroidery Co. 1333 Bay Ave Toms River, NJ 08753 call 732-506-7700 or E-mail astra-wear@estitches.com

December 2009

2 - FULL MOON (2:30 a.m. EST).

6, 7 - DAWN: Mars is about 9 deg upper left of the Moon on the 6th and a similar distance upper right of it on the 7th, with Regulus also nearby.

7 - EARLIEST SUNSET of the year (near 40 deg north latitude).

8 - LAST QUARTER MOON (7:13 p.m. EST).

10 - DAWN: Saturn is about 9 deg above the waning crescent Moon.

12, 15 - NIGHT: The Geminid Meteor Shower peaks on the night of Dec. 13-14, with noticeable activity also likely on the preceding and following nights.

16 - NEW MOON (7:02 a.m. EST).

18 - DUSK: Look for Mercury 6 or 7 deg lower right of the thin crescent Moon low in the southwest a half hour after sunset.

20 - LATE NIGHT: Mars is stationary with respect to the fixed stars this night. It then starts moving retrograde (westward) through the stars until March 11, 2010, when it will resume its normal eastward motion.

21 - THE SHORTEST DAY of the year in the Northern Hemisphere. Winter begins at solstice, 12:47 p.m. EST.

24 - FIRST QUARTER MOON (12:36 p.m. EST).

28 - EVENING: The waxing gibbous Moon covers some of the Pleiades from 7 to 10 p.m. EST.

31 - FULL MOON (12:13 p.m. EST) this is the second full Moon of the month, an event called a "BLUE MOON" thanks to the writers of *Sky & Telescope* who misrepresented this term back in 1946.

Whats up this month?

ASTRA Public Outreach & Star Parties Schedule

December 12th and 19th. Coyle Field Dark Sky Observing. Members often observe on weekend nights closest to the New Moon.

Beware!

Although ASTRA members observe at Coyle Field it is not an official ASTRA observing location; therefore you should observe at your own risk. Members will post online when they are going to observe so check the Message Boards for the latest information also call the ASTRA Hotline 609-971-8493 for updated messages.



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The *REFLECTOR* is published in March, June, September and December. If you do not receive your copy of the *REFLECTOR* magazine, contact Astronomical League Coordinator (Alcor) Ro Spedaliere (Treasurer@astra-nj.org) or the ASTRA Hotline 609-971 8493 and leave a message.



The Night Sky Network is a partnership of **amateur astronomy clubs, NASA, Astronomical Society of the Pacific, and the Astronomical League.**

Amateur astronomers regularly share their knowledge, time, and telescopes to bring amazing aspects of astronomy to the public. ASTRA is recognized as having one of the best public outreach programs in the country as recognized by Astronomy magazines "Out of this World" public outreach program contest 2 years ago thanks to the support of our members. For more information go to <http://nightsky.jpl.nasa.gov> or contact Ro Spedaliere (Treasurer@astra-nj.org) or the ASTRA Hotline 609-971 8493 and leave a message.

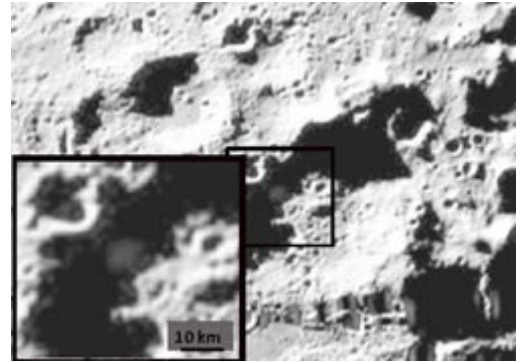
Water in Moon crater, LCROSS impact reveals

Twin impacts in the Cabeus crater created a plume of material from the bottom of a crater that has not seen sunlight in billions of years.

Provided by NASA, Washington, DC

Preliminary data from NASA's Lunar Crater Observation and Sensing Satellite (LCROSS) indicates the mission successfully uncovered water in a permanently shadowed lunar crater. The discovery opens a new chapter in our understanding of the Moon.

The LCROSS spacecraft and a companion rocket stage made twin impacts in the Cabeus crater October 9 that created a plume of material from the bottom of a crater that has not seen sunlight in billions of years. The plume traveled at a high angle beyond the rim of Cabeus and into sunlight, while an additional curtain of debris was ejected laterally.



"We're unlocking the mysteries of our nearest neighbor and, by extension, the solar system," said Michael Wargo, chief lunar scientist at NASA headquarters in Washington. "The Moon harbors many secrets, and LCROSS has added a new layer to our understanding."

LCROSS was launched June 18 from NASA's Kennedy Space Center in Florida as a companion mission to the Lunar Reconnaissance Orbiter (LRO). Moving at a speed of more than 1.5 miles (2.4 kilometers) per second, the spent upper stage of its launch vehicle hit the lunar surface shortly after 7:31 a.m. EST October 9, creating an impact that instruments aboard LCROSS observed for approximately 4 minutes. LCROSS then impacted the surface at approximately 7:36 a.m.

LRO observed the impact and continues to pass over the site to give the LCROSS team additional insight into the mechanics of the impact and its resulting craters. The LCROSS science team is working closely with scientists from LRO and other observatories that viewed the impact to analyze and understand the full scope of the LCROSS data.



Check us out on Facebook, search for (ASTRA New Jersey) and look for our logo.

Astronomical Items for Sale, or Help Wanted Advertisements: If you have an item to Sell, or need help with an astronomical problem (a question, or Telescope setup) contact the President President@astran-j.org or the ASTRA Hotline 609-971-8493 to announce it at a meeting and send the advertisement to the newsletter (See *Newsletter* below).

Newsletter: E-mail material (Meeting reports, Observing reports) to Newsletter@astran-j.org

EXECUTIVE BOARD

Executive Board: **President** – Rich Brady, President@astran-j.org; **Vice President-Secretary** – Ed Mullen, VP@astran-j.org; **Treasurer** - Ro Spedaliere, Treasurer@astran-j.org; **Newsletter Editor** – John Endreson, Newsletter@astran-j.org; **Webmaster** - John Endreson, Webmaster@astran-j.org.