

The Custer Comment

★ For The Curious ★

February 2007

Volume XXXVII, Issue 2

Executive Board

PRESIDENT

Chuck Cardona III '07

Programs & Publicity Chair

(631) 727-6769

chaz@owlnet.com

VICE PRESIDENT

Kurt Massey '07

Radio Astronomy Chair

(631) 325-2123

kamassey@verizon.net

TREASURER

Barbara Lebkuecher '07

(631)722-3850

barbaraleb@aol.com

SECRETARY

Donna L. McCormick '07

(631) 696-3333

mccormick@scientific-consultants.com

FINANCE CHAIR

Bill Bogardus '07

(631) 474-2723

wbogardu@optonline.net

DIRECTORS

Alarico Verticchio '07

(631) 477-2717

akam10@optonline.net

Dr. Jeffrey Katz '07

(631) 696-3333

katz@scientific-consultants.com

Rich Huber '08

(631) 598-4613

raflash99@aol.com

Brian Andrews, Esq '08

(631) 725-1515

bandrewsesq@optonline.net

Stunning New Image From HST

Elliptical Galaxy ESO 325-G004 in the Abell Cluster 50740



Hubble
Heritage

NASA, ESA, and The Hubble Heritage Team (STScI/AURA) • HST/ACS • STScI-PRC07-08

Upcoming Events

- SCCC and Stony Brook Science Nights
- March 3rd; Lunar Eclipse at 2 separate venues. Please see inside.
- March 17th; Custer annual St. Patrick's day celebration;
- March 31st; Introduction To The Art Of Trading Stocks, Options & Futures
- April 21st; Family Astronomy Day And Portable Planetarium Shows

Table of Contents

February 2007	Volume XXXVII, Issue 2	1
Executive Board		1
PRESIDENT		1
VICE PRESIDENT		1
TREASURER		1
SECRETARY		1
FINANCE CHAIR		1
DIRECTORS		1
Stunning New Image From HST		1
Table of Contents		2
Cover Image, Courtesy Space Telescope Science Institute (http://stsci.edu)		2
Editor's Column		3
Auditor Wanted		4
Errata		4
New HST Image of the Abell S0740 Cluster of Galaxies and Britney Spears		5
Custer Jamboree 2006 And Winter 2007 Lecture Series DVD Reservation Form		6
Gift Corner & Classifieds		7
March 3rd Total Lunar Eclipse!		8
2 Venues, 2 Opportunities, 0 Excuses!		8
At Custer Institute, 5:00 -8:30 PM		8
At Suffolk County Community College, Ammerman (Selden) Campus		8
Suffolk Community College March and April 2007 Public Lectures		8
The Moon, A New Look at an Old Friend		8
Let's Hear It For Sound!		8
Heavenly Events To Watch For February 2007		9
Upcoming Highlights in March and April		10
Winterfest 2007: St. Patrick's Day Dinner & Traditional Irish Music Concert		10
Introduction To The Art Of Trading Stocks, Options & Futures		10
Stony Brook Science Open Nights		11
Astronomy Open Night		11
The Worlds of Physics		11
The Living World		12
Film: "An Inconvenient Truth" And Panel Discussion		12
Geology Open Night		13
Nominating Committee Appointed		13
Custer Members Featured in Upcoming Arts Project		14
Two Lectures to be given by Custer members Ellen Wiener and Tom Madigan		14
Press Release/North Fork Arts Project: Spring 2007		15
North Fork Arts Projct/spring 2007 program		16

Cover Image, Courtesy Space Telescope Science Institute (<http://stsci.edu>)

This image from NASA's Hubble Space Telescope shows the diverse collection of galaxies in the cluster Abell S0740 that is over 450 million light-years away in the direction of the constellation Centaurus. The giant elliptical ESO 325-G004 looms large at the cluster's center. The galaxy is as massive as 100 billion of our suns. Hubble resolves thousands of globular star clusters orbiting ESO 325-G004. Globular clusters are compact groups of hundreds of thousands of stars that are gravitationally bound together. At the galaxy's distance, they appear as pinpoints of light contained within the diffuse halo.

Editor's Column

Tom Madigan, Editor

Tom Madigan
99 North Summit Ave.
Patchogue, NY 11772-2226
tmadigan@optonline.net
madigat@sunysuffolk.edu
tom@tommadigan.net
(631) 714-4388

Cutoff for submissions is the 15th of the month preceding publication

Visit the new Custer Website at

<http://www.custerobservatory.org>

Custer Comment Archive:

<http://www.tommadigan.net/custer>

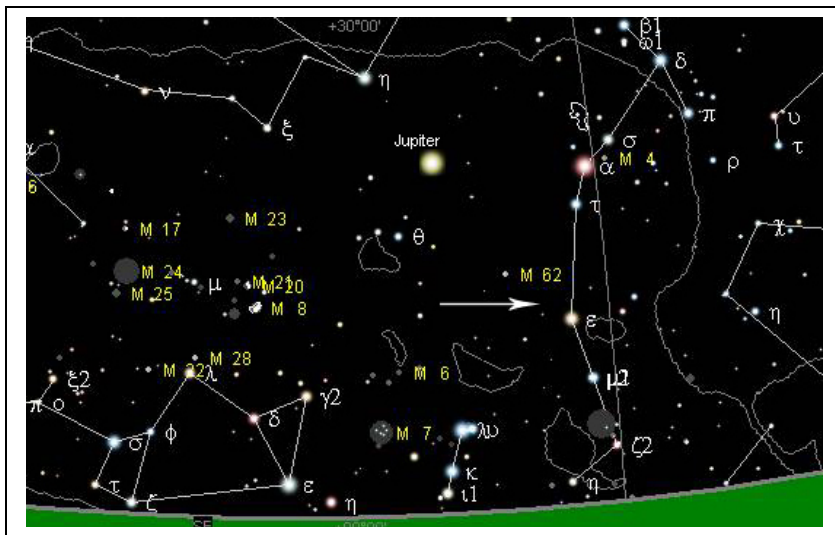
The Custer Comment is published monthly by

Custer Institute
P.O. Box 1204
Main Bayview Road
Southold, NY 11971
(631) 765-2626

"I have loved the stars too fondly to be fearful of the night."

Sarah Williams

There's much to report and write about this month. We have a brand new nova in Scorpius, fairly close to M-62, a rather obscure globular in Scorpius, quite irregular and very close to the Galactic center. In an RFT with a wide field eyepiece, you may be able to get both in the same field of view. M-62 is at RA: 17:01.2, Dec: -30:07, the nova is at 16h:57m and -32°:21'. This graphic, produced in Cartes du Ciel,



shows the position of the nova from Patchogue at 4:45 AM on the morning of 24 February, 2007 identified by a white arrow. Jupiter is about 8° to the northeast. These 3, Nova Scorpii 2007, M-62 and Jupiter would make a beautiful triplet in a pair of 11x80 binoculars.

Coming up next Saturday, March 3rd, we'll be witness to a total lunar eclipse. The moon will rise at 5:45 PM at mid-eclipse, totally immersed in earth's shadow. Please see details on page 8.

The neutrinos from Supernova 1987A arrived at Sol on Friday, 23 February (yesterday) and the New Horizons spacecraft, on mission to Pluto and the Kuiper Belt and on a slingshot trajectory, will make its closest approach to Jupiter this Tuesday, February 28th 2007.

Again, I wish to publicly thank Dr. Mike Inglis for nominating me to the Royal Astronomical Society (<http://www.ras.org.uk>). I have received formal notification from the RAS that I am now, officially, a Fellow of the Royal Astronomical Society. Thank you, Mike, both for the nomination and for your continuing guidance and tutelage.

In addition to my responsibilities at Suffolk Community College, I have accepted an appointment as Associate Adjunct Professor of Astronomy at Queensborough Community College (<http://www.qcc.cuny.edu/Physics>), teaching Introduction to Astronomy on Monday and Wednesday nights. As such, I wish to thank Tom Breeden of SCCC, through his colleague, Dr David Lieberman of QCC, for extending to me and other faculty at SCCC this opportunity. As well, I wish to publicly thank George Lomaga for recommending me for the appointment, Dr. Robert Warasila, associate chair of the SCCC Physics Department (ret) and Tom Carey for their superlative letters of recommendation.

In addition, I am currently enrolled in a distance learning graduate program at James Cook University, Queensland, Australia (<http://www.jcu.edu.au/school/mathphys/astronomy>), working towards my PhD.

Please accept my apologies, once more, for the lateness of this month's issue.

Best,

Tom

Tom Madigan, Editor

Fellow, RAS

Auditor Wanted

The position of 'Auditor' has been created. Any Custer members interested in being considered for this position or for further details, please contact Anna Verticchio or Ruth Makofske by March 9, 2007.

Errata

January 2007 Issue (<http://tommadigan.net/custer/custercomment-january2007.pdf>)

Page 18; Credit for the image obtained from Cape Cod should be attributed to Chris Cook (<http://www.abmedia.com/astro>).

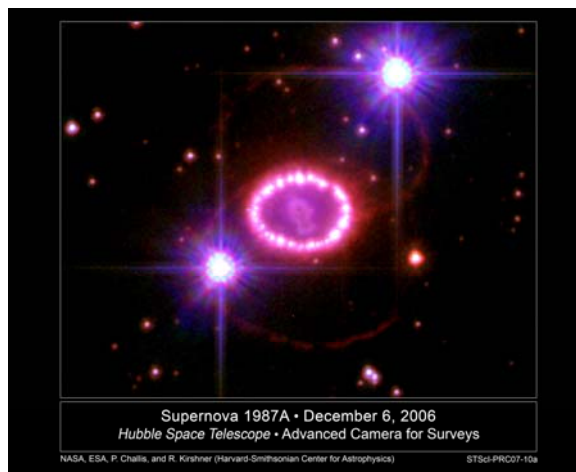
“If the stars should appear one night in a thousand years, how would men believe and adore.”

Ralph Waldo Emerson
From his essay “Nature”

New HST Image of the Abell S0740 Cluster of Galaxies and Britney Spears

An Op-Ed by Tom Madigan

What does the Abell S0740 Cluster of Galaxies (front cover of this month's issue) and the oft over-celebrated pop musician from Louisiana have in common? Nothing, utterly nothing! If you're the senior editor of New York's "Picture Newspaper", as it's commonly known, one of the latest images from the Hubble Space Telescope gets page 41 (I don't know if they even bothered to publish the image) while Britney "Shears" gets the front page simply because she decided, in some mindless and incoherent stupor, to shave her head and die the remaining stubble pink. The HST image was released the same day New York awoke to a bald Britney on the front page. According to New York's newspapers-of-record-gone-tabloid this is front page news, folks, while the stunning and ethereal beauty of Abell S0740, as revealed by the HST (recently saved from certain destruction at the hands of pusillanimous administrators, ignorant politicians and bureaucrats who are, no doubt, classmates from the same school of lower learning as these editors), isn't worthy of mention. What about Nova Scorpii 2007 or the progress of the New Horizons space probe (<http://pluto.jhuapl.edu>), so far performing flawlessly on a perfect slingshot trajectory to Pluto and beyond returning detailed images of Jupiter's cloud decks as it speeds by the giant planet? If they want to sell as many copies as possible, why not run a story about Hubble or put on the front page the stunning image of Abell S0740 (<http://hubblesite.org/newscenter/archive/releases/2007/08>), an eclectic and diverse group of galaxies that contains beautiful spirals, bejeweled with blue stars illuminating H-II regions to the giant elliptical, front and center, with thousands of globular star clusters surrounding it like a huge swarm of gnats. What about the very latest image of Supernova 1987A, from Hubble, below? If you subscribed to these Pulitzer Prize winning newspapers would you know that Friday, February 23rd 2007 is the 20th anniversary of the date that the neutrinos produced in this supernova arrived here from an object that, if it were closer than 50 light years, would obliterate our puny, arrogant and self-inflated civilization? Is it any wonder why adult college students can't work out the square root of 4 or don't know that the earth revolves about the sun? Really, they don't. That's right, folks, college students in the 21st century still thought that the sun revolved about the earth. I wonder if Britney Spears or the editors of New York's newspapers know. We shouldn't blame Britney though; she was just doing what the entire, self-absorbed populace of Tinsel Town does: much about nothing.



We live in a world where religion trumps science and policy is determined by these self-same politicians who believe that the earth is six thousand years old and that the first humans walked with the dinosaurs. We live in a world where drastic cuts are made to science, education and subsidies to the desperately poor to fund one misbegotten war after another. Welcome to the new age of intellectual darkness.

Editor: The opinion expressed here is the private opinion of the author and may not reflect the official position of Custer Institute or its Board of Directors.

Custer Jamboree 2006 And Winter 2007 Lecture Series DVD Reservation Form

Name: _____

Address: _____

Phone: _____

Email address: _____

Number of sets desired: _____

Set requested (Jamboree 2006 or Winter 2007 Lecture Series): _____

For each set requested, please remit \$10.00.

For the Jamboree 2006, each set consists of 5 DVDs of each of the featured speakers:

- Dr. Ken Lanzetta, "Dark Energy, Dark Matter";
- Dr. David Helfand, "Intelligent Life in the Universe?";
- George Lomaga, "Shadow Across the Sun: 2006 Total Solar Eclipse";
- Robert Gendler, MD, "The Hybrid Image: A New Philosophy of Aesthetic Astroimaging";
- Tony Hoffmann, "On the Trail of Sungrazing Comets";
- In addition to these 5 lectures, a 6th bonus, multi-media DVD of all the best images obtained at the jamboree will be included.

The Winter 2007 Lecture Series set will consist of a DVD for each of the 6 lectures.

Please send this completed Reservation form with a check in the amount of \$10.00 for each set requested as a deposit, payable to **Custer Institute** to:

Custer DVD Set
c/o Tom Madigan
99 North Summit Ave
Patchogue, NY 11772

Electronic recipients will receive an email confirmation that their DVD set(s) have been reserved. All others will receive a telephone call.

Note: all proceeds go directly to Custer Institute in order to continue our outstanding programs, lecture series and service to our membership, to science and to the community at large. A portion of these proceeds are used to cover the cost of production and shipping.

Gift Corner & Classifieds

We Have Meteorites!

Great sets mounted in beautiful display cases. Perfect for gifts.

Custer coffee mugs, only \$4.
Do you have yours yet?

Custer Dome Assembly and Raising DVD

\$10.00

2 Payment

Options:

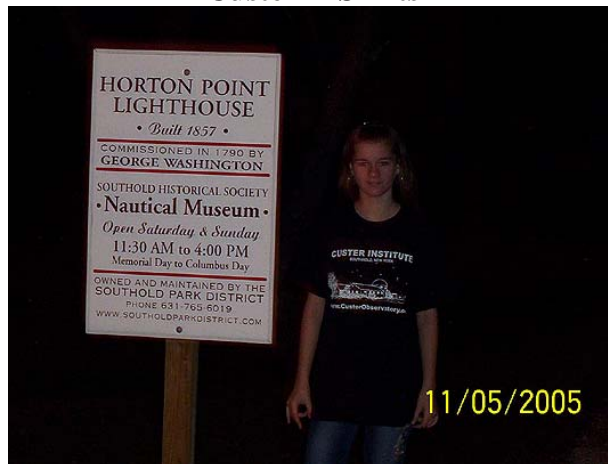
1) Mail a check or money order, payable to Custer Institute, to this editor's address with a note indicating how many copies you would like; 2) Paypal to CusterPaypal@yahoo.com followed by an email to this editor indicating the number of copies ordered and shipment instructions. Before shipment, I will confirm with Barbara that payment has been made. All my contact info is always published on page 3.

An Evening With John Dobson

VHS or DVD format, \$10.00, \$3.75 S & H

On September 17, 2005, noted sidewalk astronomer and cosmologist, John Dobson, visited Custer. He presented his classic cosmic slide show, packed with information and delivered with inimitable wit; he shared stories about his life as a monk, secretly grinding mirrors, making telescopes and introducing the public to the wonders of the night sky. Board member, Rich Huber, filmed this memorable event and has made copies on VHS and DVD. Running time is approx. 90 minutes. The cost: \$10 with 25% of the proceeds going to John Dobson's San Francisco Sidewalk Astronomers Association and a nominal \$3.75 for shipping and handling. You can pay for your tape using Paypal by sending \$13.75 to CusterPaypal@yahoo.com or by sending a check or money order (made payable to *Custer Institute*) to: Dobson at Custer, P.O. Box 1204, Southold, New York 11971. Please specify whether you would like VHS or DVD. If you have any questions, please contact Donna McCormick at mccormick@scientific-consultants.com.

Custer T-Shirts



Image, courtesy Tom Madigan

The editor's daughter, Kaitlin, sporting a Custer T-Shirt at Horton Point Lighthouse on Jamboree '05 night! The shirts are 100% heavy-weight cotton, machine-washable, and are available in adult sizes S-M-L-XL-XXL. The cost is \$12 plus \$3.75 S & H and the shirts are available only while supplies last. Custer would also like to *thank the East End Shirt Company* in Port Jefferson for their generosity and for having done an excellent job in producing such fine quality shirts on such short notice.

We have Susan Harder's patented & dark sky friendly **PARSHIELD®**

Outdoor Floodlight Shields

for PAR 38 type bulbs. Controls glare, reduces light trespass & allows you to direct the light where you need it.

Two shields per box in your choice of Off White or Bronze finish. \$20.00, tax incl.

ASTRONOMY FOR ALL AGES

By

Phil Harrington

&

Ed Pascuzzi

The Gift Shop still has a number of copies of this latest volume by Phil Harrington with co-author Ed Pascuzzi. Get your copy while supplies last. At just \$20, this is a real bargain! As an added bonus, copies are signed by Ed.

PARALLAX

By

Alan W. Hirshfeld

We also have a limited number of copies of this excellent volume by 2003-Jamboree guest speaker Alan Hirshfeld. Quantities are limited so hurry and add this well-written and informative volume to your collection while supplies last.

March 3rd Total Lunar Eclipse!

2 Venues, 2 Opportunities, 0 Excuses!

At Custer Institute, 5:00 -8:30 PM

Join us as we observe (weather permitting) one of the most impressive of all sky shows. The eclipse is expected to begin at about 5:44, reach totality at 6:20, then conclude by 8:12 PM. Normal Saturday night observing will follow. As always, refreshments will be available. Admission: FREE (but donations are always appreciated!)

At Suffolk County Community College, Ammerman (Selden) Campus

To celebrate the event, Astronomers from
Suffolk County Community College
will be holding an Eclipse night on Veterans Plaza at the Ammerman campus.

Beginning at about 4.30, we will have a selection of telescopes available for use to see the eclipse,
as well as stars and planets!

Bring the family and see one of the spectacles of the night sky!

For further details log onto

<http://web.mac.com/mdiastro/iWeb/LunarEclipse/LunarEclipse.html>

Note: This editor will be assisting at Suffolk County Community College

Suffolk Community College March and April 2007 Public Lectures

The Moon, A New Look at an Old Friend

When: Monday, March 5th, 2007, 7:30 PM;

Where: Room T109, Smithtown Science Building, Ammerman Campus

Instructor: Dr Mike Inglis

NASA is planning to re-visit the Moon, so what better time to have a new look at something we all recognize. Dr. Mike will present a fresh look at our closest neighbor in the skies using new, and not so new images, movies and sounds! Often the subject of myth and lore, he will discuss its ancient and violent past, the present day, and what eventualities may befall it in the far-distant future.

Let's Hear It For Sound!

When: Monday, April 9th, 2007, 7:30 PM;

Where: Room T109, Smithtown Science Building, Ammerman Campus

Instructor: Professor Gerry Schnall

Professor Gerry Schnall will deliver, with his usual flair, an introduction to how sound is generated and its connection to waves. The lecture will cover how sound waves are produced, as well as the speed of sound, the Doppler Effect, interference of waves, and standing waves.

Demonstrations of interference and standing waves will be shown. Hearing aids **not** compulsory.

Note: Weather permitting, observing, using the department's telescopes, will commence immediately following all lectures.

Heavenly Events To Watch For February 2007

“ ... And all about the cosmic sky,
The black that lies beyond our blue,
Dead stars innumerable lie,
And stars of red and angry hue
Not dead but doomed to die. “

Julian S. Huxley

brightening east-southeast horizon after daybreak. JUPITER, now among the southern stars of Ophiuchus, rises around 2:30 AM at midmonth, and is still quite low in the south-southeast at daybreak. Spending the year in Leo the Lion, SATURN alone among the planets rules the night sky this month and is up all night long. We pass the 0.0 magnitude Saturn (in our respective orbits) on the 10th.

The first half of February is a very good time to become acquainted with MERCURY if you haven't already done so. Just find VENUS, the brilliant object low in the west-southwest after sunset, then scan less than ten degrees downward and to the right of Venus for Mercury. Use binoculars, and wait for the sky to darken a little bit more to spot it by naked eye. A telescope would reveal Mercury's "quarter-moon phase" appearance on the 7th as it reaches elongation east of the Sun. MARS can be seen low over the

- 1 Full Snow Moon rises just before sunset this evening.
 - 2 Saturn will be found rising atop the bright Moon by nightfall. Later, around 7:42 PM, Algol, β Persei, will be in mid-eclipse.
 - 7 Mercury is at greatest elongation east of the Sun. It would appear even closer to Venus if it were not also at perihelion (closest approach to the Sun) 3 days from now.
 - 10 Saturn reaches opposition as we pass between it and the Sun. Enjoy this beautiful world by telescope as its equatorial girth measures at 20 arcseconds and its rings, tilted just 14° from edge-on, span across 45 arcseconds of space.
 - 12 The waning crescent Moon rises soon after 3 AM this morning, accompanied by Jupiter.
 - 15 Around 6 AM the thin crescent Moon rises with red Mars off to its left.
 - 19 The thin new crescent Moon smiles above Venus this evening, low in the west.
 - 22 Algol is in mid-eclipse at 9:27 PM, (and again at 6:16 PM on the 25th). Later, around 11:13 PM tonight the 4.6 magnitude star ϵ (Epsilon) Arietis will disappear along the dark left edge of the waxing crescent Moon.
 - 23 At 7:35:35 Universal Time on Feb. 23, 1987, 20 years ago, the Earth received the first signal of a supernova event in the form of a neutrino count. Early the next morning, at the Las Campanas Observatory in Chile, astronomer Ian Shelton saw the supernova in a photographic plate he had just developed. It was SN 1987A, in the nearby Large Magellanic Cloud. Maxing at 4.0 magnitude, it was the brightest supernova since 1604.
 - 23 Check out the first-quarter Moon and the Pleiades Cluster squeezing just under it. Use binoculars.
 - 28 Around 7:40 PM watch the 4.7 magnitude star γ Cancri occulted by the dark left edge of the Moon.
- March 1 Around 9 PM watch Saturn squeeze past the bright gibbous Moon.
- March 3 Full Worm Moon tonight. As it rises (around sunset) it will be just going into TOTAL ECLIPSE and you might not see it at all until the sky gets a bit darker. Bring telescope or binoculars! Totality begins at 5:44 PM and ends at 8:11. The southern highlands will be darker as they will be deeper into the Earth's shadow.

Prepared by Robert Chapin

Upcoming Highlights in March and April

Winterfest 2007: St. Patrick's Day Dinner & Traditional Irish Music Concert

Saturday, March 17, 6:00 - 10 PM

As is customary at this annual event, a corned beef and cabbage dinner will be prepared by Custer president Chuck Cardona. Feel free to add to the table by bringing your favorite dish or dessert. Dinner will be followed at 8 PM by a live concert of traditional Irish music performed by Stephen and Susan Sanfilippo, internationally-known folk musicians and founders of the Long Island Traditional Music Association. This event is being sponsored in part by the *New Suffolk Civic Association* and the *East End Arts Council's Winterfest 2007*.

Suggested Donation:

\$10, Custer or Civic Assoc. Members;

\$15 Non-Members, Free for children accompanied by a parent.

Introduction To The Art Of Trading Stocks, Options & Futures

Saturday, March 31, 2007, 4:00 - 6:00 PM

This seminar will cover the basics of direct access online trading. The discussion will include the various kinds of trading instruments, orders and effective techniques for maximizing profit and reducing risk, as well as the art of successful trading. Instructor: Jeffrey Owen Katz, Ph.D., has authored three books on trading (including the classic, *The Encyclopedia of Trading Strategies*), was Contributing Editor to *Technical Analysis of Stocks and Commodities*, an instructor at the New York Institute of Finance, and is a principal partner in Blackhorn Asset Management LLC. Dr. Katz is also President of Scientific Consultant Services (www.Scientific-Consultants.com), a Custer Board Member and its Observatory Director.

Suggested Donation:

\$25 Custer Members, \$35 Non-Members.

Reservations Required By March 24 (email CusterDonna@yahoo.com). In-Service Credit: If your district awards one credit for every 15 hours of instruction, two-fifteenths of a credit may be received for this seminar.

Stony Brook Science Open Nights

Astronomy Open Night

Friday, March 2, 2007

7:30 pm

Room 001 ESS Building

Prof. Aaron Evans

Dept. of Physics & Astronomy

Stony Brook University

"Transiting Planets"

One of the most exciting areas of astronomy in the last few decades has been the identification of planets orbiting stars other than our Sun. These planets have been primarily found via spectroscopic measurements of the Doppler shift in the light of the host star as both the star and planet move around a common center of mass. The success of such surveys has allowed us to determine how common solar systems are in the Galaxy, and has aided in testing our models of planet formation. But the detection of planets using Doppler shifts has limits and other techniques are being developed.

In the next lecture in the popular series, Astronomy Open Night, Prof.

Aaron Evans will summarize a recent survey that aims to increase the number of extra-solar planets known by monitoring changes in the light output of stars due to planets transiting across the star. The results and biases of this technique will be compared with the spectroscopic methods.

Dr. Evans joined the faculty at Stony Brook in 1999 after spending several years at CalTech. He is an observational astrophysicist specializing in Radio and Infrared where he studies the formation and evolution of galaxies.

Following the lecture, weather permitting, there will be a viewing session with the University's telescopes.

The Worlds of Physics

Friday, March 9, 2007

7:30 pm

Room 001 ESS Building

Richard Lefferts

Dept. of Physics & Astronomy

Stony Brook University

"Counting Teeth to Counting Nuclei: Dating (with) an Accelerator"

An experienced veterinarian or handler can determine the age of a horse by observing and counting the animal's teeth. Anyone can determine the age of a cut tree by observing and counting the growth rings.

We propose to establish a facility in the Stony Brook University Dept. of Physics & Astronomy for determining the age of submitted samples by counting the nuclei of certain rare atoms in the sample.

We hope to create a unique center for the use of this technique, Accelerator Mass Spectrometry, primarily for education. College students of geology, anthropology and history, plus high school classes of biology, chemistry and physics can submit material they have collected, watch us prepare the sample during a video conference and then conduct the experiment themselves via a Web interface.

We believe that the cross-disciplinary educational value of the experience, plus the sheer thrill of running a particle accelerator from the classroom, will attract students and teachers from across Long Island and everywhere the Web reaches.

We will use the Stony Brook 9 MegaVolt Tandem Van de Graaff accelerator, which is no longer used for nuclear physics research and is an excellent tool for Accelerator Mass Spectrometry. We have also received donations of equipment from the laboratory which originated AMS, the University of Rochester, and from one of the flourishing centers of AMS work today, PRIME Lab at Purdue University. Work is underway to adapt the facility, make initial measurements and create the interface for remote conferencing and control.

Following the lecture there will be refreshments and a chance for discussion.

The Living World

Friday, March 16, 2007

7:30pm

Room 001 ESS Building

Film: "An Inconvenient Truth" And Panel Discussion

"An Inconvenient Truth" directed by Davis Guggenheim, featuring Al Gore, followed by a panel discussing the science and politics behind the film. Panelists include Howard Schneider, Dean of School of Journalism; Malcolm Bowman, Professor of Marine Sciences; Jeffrey Levinton, Professor of Ecology & Evolution.

"An Inconvenient Truth" is a vehicle for Gore's argument that we can no longer afford to view global warming as a political issue - rather, he claims that it is the biggest moral challenge facing our global civilization. Is this so? What is the science behind this? How does this film fare as journalism? The panel discussion will follow the film.

Come early! Seats are limited.

Editor: For anyone who hasn't viewed this film and is concerned about the environment, this blockbuster is a must see!

Geology Open Night

Friday, March 23, 2007

7:30pm

Room 001 ESS Building

Prof. Richard J. Reeder

Dept of Geosciences

Center for Environmental Molecular Science Stony Brook University

"Heavy Metal Contaminants in the Environment, and How Bioaccessibility Affects Human Health"

Arsenic, chromium, lead, and mercury are just a few of the toxic metals that are being found in increasing amounts in soil, water, and air. The extent of health risks on exposure to such metals depends on their chemical form and the many complex processes that influence their geochemical behavior.

Bioaccessibility is the proportion of a toxic substance in an environmental setting which is available to interact with an organism. Bioaccessibility is one of the fundamental concepts for evaluating the potential for human exposure and varies widely among different metals and different environmental settings. Using examples from around the world, we will examine some of the geological and geochemical factors that influence bioaccessibility of toxic metals, how scientists study them, and the consequences to human health.

Prof. Reeder's research focuses on geochemistry and mineralogy, with an emphasis on the mechanisms and processes operating at the mineral-water interface. A major goal of this work is to understand the role that mineral surfaces play in growth, dissolution, and the uptake of dissolved metals. Because of their reactive nature and their common occurrence in sediments, soils, and rocks, carbonate minerals are the focus of much of this work. Closely related research addresses crystal chemistry and structural phase transitions in minerals.

Following the lecture there will be refreshments and a chance for discussion.

Nominating Committee Appointed

The following Custer members have been appointed as this year's nominating committee:

Ruth Makofske, Chairperson;

Anna Verticchio, Co-Chairperson.

Any Custer Members interested in being considered as a candidate for a position on the Board of Directors should contact Anna (akam10@optonline.net) and/or Ruth (goya@optonline.net) by March 17, 2007.

Custer Members Featured in Upcoming Arts Project

Two Lectures to be given by Custer members Ellen Wiener and Tom Madigan

NORTH FORK ARTS PROJECT, SPRING 2007
JOYCE BECKENSTEIN, COORDINATOR (631-871-1556)

Medieval to Modern: Forms from Faith

Part I - Ellen Wiener: Secular to Sacred

art exhibition and lecture miniseries at
ART SITES , RIVERHEAD

Sunday, March 18, 4pm;
From Medieval to Modern: Painting Toward a Book of Hours; Ellen Wiener speaks about her pilgrimage and the Medieval Book of hours as they relate to her art. **FREE**

Saturday, April 14 at 4pm;
Cosmology Through the Ages; talk by Tom Madigan of Custer Institute, and **Temporal Grammar: Illuminations Of Hildegard von Bingen,** talk by Ellen Wiener. **FREE**



For reservations
contact Glynis Berry at
ART SITES
631-591-2401
6631-59131-591-

In October, 2006, North Fork artist, Ellen Wiener took a long walk. Her journey along the pilgrimage route to Santiago de Compostela in Spain retraced the routes pilgrims have trod since the Middle Ages. Her odyssey and her medieval - based contemporary art is inspiration for *Medieval to Modern, Forms from Faith, Part 1: Secular to Sacred.*

Press Release/North Fork Arts Project: Spring 2007

Joyce Beckenstein, Coordinator, 631-298-9613 ([press only](mailto:joybeck@optonline.net)) joybeck@optonline.net

[Medieval to Modern: Forms from Faith, Part I](#)

Secular to Sacred, Works by Ellen Wiener

Art Exhibition and Lecture Miniseries at Art Sites, Riverhead

- **Talk I: Sunday, March 18, 4pm, [From Medieval to Modern, Painting Toward a Book of Hours](#), Ellen Wiener, free to public**
- **Talk II: April 14, 4pm, [Cosmology Through the Ages](#), Tom Madigan, free to public**
- **Talk III: April 14, 4:45 pm, [Temporal Grammar: Illuminations of Hildegarde von Bingen](#), Ellen Wiener, free to public**

Ellen Wiener's intimate paintings, prints and drawings, like her recent pilgrimage to Santiago de Compostela in Spain, are part of a personal journey through time. Her imagery, based on medieval allegories from the Hebrew Bible, Christian, Pagan and Islamic sources, celebrates the tradition of the miniature and the practice of reflection. She uses the private scale of an illuminated page to telescope and embody large universal themes through a lens of personal experience. Ellen's works are dense kaleidoscopes, both vibrant and quiet, that honor the desire to link the sacred and the secular, and to draw significant parallels between the medieval mind and our own contemporary concerns.

From Medieval to Modern, Painting Toward a Book of Hours, is the first of three talks, free to the public, to accompany the exhibition **Sacred to Secular**, at Art Sites in Riverhead. Ellen Wiener will conduct a tour of her works, and discuss how they relate to the Book of Hours, with their references to ancient sources that extend forward to examine the spiritual content of Protestant sects, The Koran and some Quaker verse.

There will be two more talks on April 14. Tom Madigan, Fellow of the Royal Astronomical Society, editor of the **Custer Comment**, and Adjunct Professor of Astronomy will talk about **The Evolution of Cosmology Through the Ages: Medieval Thought through Modern Astronomy**. His talk examines cosmology from medieval times through Newton, Einstein and Hubble, and explores the political and religious schisms between religion and science through time.

The second talk by Ellen Wiener, **Temporal Grammar: Picturing Time in the Illuminations of Hildegarde von Bingen**, was presented to the International Congress on Medieval Studies in 2006. This talk focuses on the legendary 12th century abbess Hildegarde, a medieval composer, healer, politician, illuminator and visionary whose writings resonate with modern thought and practice. Ellen Wiener will discuss the impact of Hildegarde's theories on her art.

Contact: Glynis Berry at Art Sites for reservations (631- 591-2401)

The exhibition and talks are part of a two month collaborative program, [Medieval to Modern: Forms from Faith](#) (see press release I for complete description of program)

North Fork Arts Project/spring 2007 program

A Collaborative Program with Public and Private Organizations

JOYCE BECKENSTEIN: COORDINATOR

PRESS RELEASE

Medieval to Modern: Forms from Faith

In October, 2006, North Fork artist, Ellen Wiener, took a long walk. Her journey along the pilgrimage route to Santiago de Compostela in Spain retraced the route that pilgrims have trod since medieval times. This odyssey brought new insights to her contemporary, medieval-based art, with its references to Christian, Pagan, Hebrew, Protestant and Islamic sources. Ellen's compelling journey is inspiration for **Medieval to Modern: Forms from Faith**, the North Fork Arts Project spring program.

This ambitious interdisciplinary series surveys faith based art forms from the perspective of ancient, modern, local, global and personal perspectives. From the hushed sanctuaries of North Fork historic churches to the wretched world of Palestinians living in occupied lands, this program of events explores art as the spiritual glue of human faith, its invention and reinvention of icons, images, and architectural forms that symbolize the tenacity of human hope in the face of human folly. (*Please note that separate press releases will be made for each event listed below. This announcement is an overview of events covering a two month program. Details of events will also be ongoing and available through designated venues*)

CONTACT: JOYCE BECKENSTEIN (631-298-9613, PRESS ONLY)

NORTH FORK ARTS PROJECT

MARCH-MAY 2007, Joyce Beckenstein, Coordinator

MEDIEVAL TO MODERN: FORMS FROM FAITH

PART I: Ellen Wiener: Exhibition of Works at Art Sites, Sponsored by Art Sites, Riverhead, (contact Glynis Berry, 631-591-2401)

Sunday, March 18, 4:00 – Exhibition tour and talk, *From Medieval to Modern: Painting Toward a Book of Hours*, Ellen Wiener speaks about her pilgrimage and the Medieval Book of Hours as they relate to her art.

Saturday, April 14, 4:00 – **Temporal Grammar: Picturing Time in the Illuminations of Hildegard von Bingen**, a talk by Ellen Wiener, and **Cosmology Through the Ages; Medieval Thought through Modern Astronomy**, by Tom Madigan of Custer Institute.

Part II: A Pilgrimage to Historic North Fork Churches, Sponsored by The Southold Historical Society (contact Geoff Fleming, 631-765-5500)

Thursday, April 26, 4:00 - Peconic Landing; A talk by Joyce Beckenstein, "**From Gothic Cathedrals to American Gothic**," provides background for a tour of historic North Fork churches.

Saturday, April 28, 12-4 - This self-guided **Tour of Historic North Fork Churches** includes presentations, including a talk by Wendy Prellwitz about the Universalist Church murals by Peconic School artist, Edith Prellwitz.

PART III: Art and Faith, Sponsored by the Mattituck-Laurel, Cutchogue, and Floyd- Memorial Libraries (contact Joyce Beckenstein, 631-871-1556)

Friday, May 4, 6:00 - Mattituck-Laurel Library; **Medieval to Modern: From Ancient Design to Modern Politics**; This multi-media program features works by Mattituck High School students of art based on Middle Eastern Islamic designs, and a recording, exhibit and talk by artist-writer Hazel Kahan about **Yusuf's Story**, her WPKN radio interview with a Palestinian living in occupied lands, produced by Tony Ernst of East End News Team.

Monday, May 7, 7:00 - Cutchogue Library; Amei Wallach, art critic and journalist, presents a powerpoint talk "**When Art and Faith Meet.**"

Saturday, May 12, 2:30 - Floyd-Memorial Library, Greenport; Artist Gail Horton will give a talk about her tapestry exhibit **The Three Crosses of County Kildare**, and its Celtic symbolism.

PART IV: BUS EXCURSIONS, Sponsored by the Floyd-Memorial Library (contact Poppy Johnson, 631-477-0660)

THE MORGAN LIBRARY: Wednesday, April 11, 8:00 am - 6:00 pm - **Apocalypse Then**, with curator William Voelke; a private lecture with curator William Voelke for North Fork visitors of this special exhibit of manuscripts from the Book of Revelations, lunch, and guided tour of this historic museum, its collections and architectural additions by Renzo Piano.

THE CLOISTERS AND THE MET: Thursday, May 10, 8:00 am – 6:00 pm - This full day excursion includes a staff-guided tour of The Cloisters, and a separate visit to the Metropolitan Museum of Art where Joyce Beckenstein will conduct a special tour of paintings from the Middle Ages and Northern Renaissance.

PATCHOGUE PRINTING
"Your Image Is Our Business"
 Stationery • Forms • Invitations • Newsletters
 Business Cards • Brochures • Menus • Tickets

DIGITAL COLOR COPIES


23 Havens Avenue • Patchogue, New York 11772
 (1 block west of N. Ocean Avenue)
 (631) 447-1506 • Fax (631) 447-1508



RADIO ASTRONOMY SUPPLIES

Your International Supplier of Quality Radio Astronomy Products Since 1994
 Radio Telescopes, LNA's, Noise Calibration Sources, Books, Videos, and
All Associated Items for Radio Astronomy Researchers and Government Applications. Appraisal Services
Contact:
 Jeffrey M. Lichtman
 Phone: 954-722-5243
jmlras@mindspring.com
<http://www.nitehawk.com/rasmit/ras.html>
 P.O. Box 450546, Sunrise, FL 33345-054

ROBERT A. VANSON



VANSON FINANCIAL
 REGISTERED INVESTMENT ADVISOR
"Your Life Planner"

37 Valley Forge Dr., Bohemia, NY 11716 631-218-2350
 homepage <http://www.vansonfinancial.com> E-mail bvanson@aol.com

**** Astrotec ****
Telescopes and Accessories
 Celestron Meade TeleVue JMI SBIG
 Orion Lumicon Kendrick Stellarvue
EXPERT TECHNICAL HELP
Astro-photography Specialist

631-563-9009 **Frank**