

Custer Institute and Observatory Inc. (est. 1927)

1115 Main Bayview Road (South of Route 25), P.O. Box 1204, Southold, New York 11971; 631-765-2626

www.CusterObservatory.org

32nd ANNUAL ASTRONOMY JAMBOREE

Saturday, October 9, 2010

Seating is limited. Reservations are Required.

ALL EVENTS WILL BE HELD AT CUSTER OBSERVATORY

1115 Main Bayview Road, Southold, New York 11971 (just south of Rte. 25)

The times below are approximate. We'll make every effort to keep on schedule.

- ◆ 12:30 - 1:30 Registration: Check in
- ◆ 1:30 PM "Modifying Telescopes for Disabled Observers" Rich Huber, Ron Lindenfeld, AOS
- ◆ 2:15 PM "NASA's Social Butterfly Effect" Tony Hoffman, AAANY
- ◆ 3:00 PM Break
- ◆ 3:15 PM "Cosmic Cinematography: The Large Synoptic Survey Telescope" Justine Haupt, BNL, Custer
- ◆ 4:00 PM "Gravity Waves" Dr. James Levy, ASLI
- ◆ 4:45 PM Break
- ◆ 5:00 PM "The Icy Moons of Saturn" Andy Poniros, ASNH, JPL/NASA
- ◆
- ◆ 5:45 PM Dinner Break
- ◆
- ◆ 8:00 PM Keynote: "Lessons from Astrophotography" Dr. Ruben Kier
- ◆ 9:00 PM "The Universe in Verse" poetry with Bob & Steve Chapin
- ◆ 10:00PM Star Party (weather permitting)



Keynote Speaker
Dr. Ruben Kier, author of
The 100 Best Astrophotography Targets

KEYNOTE SPEAKER: **Ruben Kier, M.D., "LESSONS FROM ASTROPHOTOGRAPHY"**

You may have thought that spending all night photographing an obscure celestial object takes you away from the fun of visual astronomy. Well, be prepared for a surprise. Processing and studying your images can enrich your visual experiences. Learn how emission nebula are more extensive than we thought, and why reflection nebula have complex colors. Find out how to see colors in the stars of bright open clusters. Discover why the individual stars that sparkle in a globular cluster are mostly red giants. Understand what makes a supernova glow at the eyepiece...it's not what you may first suspect. Dr. Kier will take you on an exploration of the cosmos through dozens of his own photographs, obtained through popular amateur telescopes similar to your own! [Ruben Kier, M.D.](#) is a diagnostic radiologist and author of *The 100 Best Astrophotography Targets: A Monthly Guide for CCD Imaging with Amateur Telescopes* (Patrick Moore's Practical Astronomy Series, published by Springer, 2009). His photos and articles have appeared in *Astronomy*, *Sky & Telescope*, and *Astrophotography*. He serves on the Astronomical Advisory Council of the University of Florida.



Rich Huber



Ron Lindenfeld

"MODIFYING TELESCOPES FOR DISABLED OBSERVERS"

Certain improvements can be made to telescope design that will allow disabled astronomers to conveniently reach the eyepiece from a seated position. The techniques include shortening the focal ratio and using an innovative mount design, and folding the optical path and making liberal assumptions about the size of the obstruction that can be tolerated in a Newtonian telescope. **Rich Huber and Ron Lindenfeld** are members of the [Amateur Observers' Society of NY](#) (AOS). Rich is AOS Vice President, a former Custer Board Member, a retired systems analyst and has been building telescopes since he was a teenager. Ron is an Associate Prof. of Aviation at Dowling College whose interest in astronomy began at the age of eleven.

"NASA'S SOCIAL BUTTERFLY EFFECT"



Tony Hoffman

Over the past few years, NASA has aggressively exploited the Internet and social media in an effort to increase public awareness and support for its mission, from its network of websites to numerous Facebook pages, Twitter feeds, YouTube and Flickr accounts. The space agency has even enlisted hundreds of Twitter users, chosen at random from pools of applicants, to attend Shuttle launches and NASA missions, events, and conferences as Twitter correspondents. Tony Hoffman, a guest at four such "tweetups," will give an inside look at such events and discuss the growing bond between NASA professionals and space enthusiasts, and how it plays out both in-person and online. [Tony Hoffman](#) is on the Board of the [Amateur Astronomers Association of NY](#), and works as an analyst for [PCMag.com](#). Tony has discovered 117 comets in images from the Solar and Heliospheric Observatory (SOHO), has co-discovered one near-Earth asteroid as a volunteer for the Spacewatch FMO Project, and has an asteroid named after him: 112900Tonyhoffman.

"COSMIC CINEMATOGRAPHY: THE LARGE SYNOPTIC SURVEY TELESCOPE"



Justine Haupt

Later in this decade, the Large Synoptic Survey Telescope (LSST) will turn on and start producing 20 Terabytes of data per night, imaging the entire visible sky every three nights at a resolution that is over four times greater than the Sloan Digital Sky Survey. After 10 years of operation that will total 2.5×10^6 images and 60 Petabytes of information, a new domain of information will have been revealed, one which has never before existed on a cosmological scale--a movie of the universe will have been created! Justine Haupt will discuss the LSST project, its significance, and her role in developing it. **Justine Haupt** is an engineer at Brookhaven National Laboratory's Instrumentation Division. She is a Senior Observatory Staff Member at [Custer](#). She studied aeronautical science at the University of North Dakota and physics at the State University of N.Y. at Stony Brook.

"GRAVITY WAVES"



Dr. James Levy

Back in 1916, Einstein hypothesized the existence of gravity waves, which are considered to be "ripples" in the space-time continuum that are created by the movement of large masses of matter, such as two neutron stars orbiting each other. However, they have properties quite different from those of the other three fundamental forces of nature (electromagnetism, the weak force, the strong nuclear force) and proved surprisingly difficult to detect. This lecture will be an introduction to the concept of gravity waves, why they are so strange, and how we have yet to directly confirm their existence. **James P. Levy, Ph.D.**, is an Assistant Professor of History at Hofstra University, authored two books, and is a former president of the [Astronomical Society of Long Island](#).

"THE ICY MOONS OF SATURN"



Andy Poniros

The Cassini mission to study Saturn provided a wealth of info about the Saturn System and its moons--62 have been discovered so far, all having characteristics that vary widely. The data being gathered by the mission will undoubtedly help further our understanding of the Earth, the formation of the solar system, and the possibility of life in our own back yard. This presentation will feature fascinating discoveries made by Cassini on Enceladus and Titan, as well as other Icy Moons of Saturn. **Andy Poniros** is a diagnostic imaging engineer, a Lunar Rock Certified demonstrator, a [NASA Solar System Ambassador](#), a Member of the [Astronomical Society of New Haven](#), enjoys telescope building, and has produced Podcasts for [365-DaysOfAstronomy.org](#).

LETTERS FOR CREDIT FOR TEACHERS AND STUDENTS

Upon request, letters will be provided to teachers and students who attend the lecture portion of the program. Contact:

CusterDonna@yahoo.com

STAYING OVERNIGHT? SAY THANKS TO THE HOTELS PROVIDING JAMBOREE REGISTRANTS A DISCOUNT

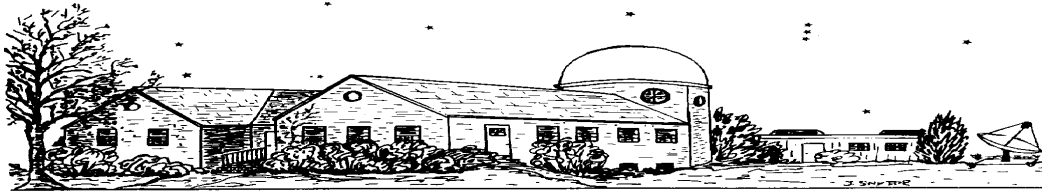
[Silver Sands Motel](#) 631-477-0011

[Drossos Motel](#) 631-477-1334

For information about other hotels, restaurants, and area attractions, visit:

[North Fork Promotional Council](#)

Our deepest appreciation to the speakers, poets, and clubs; to Steve Bellavia, Jamboree MC; and to all the other hard-working volunteers who are making this event possible.



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OCTOBER 9, 2010 ASTRONOMY JAMBOREE REGISTRATION FORM

Seating is limited so reservations are required. To register, contact: BarbaraLeb@aol.com and

Send this form by October 6th to: Custer Jamboree, P.O. Box 645, Jamesport, New York 11947

Note: Registration fees indicate suggested donations to support our programs. Custer will never turn away a curious mind.

PLEASE PRINT

DATE _____

Name _____

Email Address _____

Address _____

City _____ State _____ Zip _____ Phone _____

\$ _____ I am a Member of ___ Custer, ___ AAANY, ___ AOS, ___ ASLI, ___ ASNH. Please reserve _____ tickets at \$35 each.

\$ _____ Please reserve (specify number of tickets in blanks): ___ \$45 Non-Members, ___ \$30 Seniors, ___ \$20 Full-Time Students.

\$ _____ I am only going to attend Dr. Kier's Keynote Address. Please reserve ___ tickets at \$15 each.

\$ _____ I want to join Custer: ___ Individual \$45, ___ Family \$60, ___ Senior/Student \$25, ___ Sponsor \$100, ___ Benefactor \$250, ___ Patron \$500

\$ _____ I would like to make a tax-deductible donation to Custer Institute in the amount of \$ _____

\$ _____ **TOTAL.** Please note: sorry, no refunds will be permitted.

Check One: Enclosed is my check (payable to: Custer Institute), or
 I have made payment via Paypal.com to the account of CusterPaypal@yahoo.com

Send this form by October 6th to: Custer Jamboree, P.O. Box 645, Jamesport, New York 11947

The Custer Institute is a 501(c)(3) NYS educational nonprofit, staffed by volunteers and reliant on public support. The observatory is open to the public every Saturday night; staff provide guided tours of the night sky thru the Institute's telescopes (weather permitting).