



400 YEARS *of the* TELESCOPE

A JOURNEY OF SCIENCE, TECHNOLOGY AND THOUGHT



Documentary Trailer Premiere
**400 Years of the
 Telescope trailer
 debuts at St. Louis**

The *400 Years of the Telescope* documentary producers will attend the 212th American Astronomical Society (AAS) Meeting/Astronomical Society of the Pacific (ASP) IYA Symposium in St. Louis, Missouri, on June 3rd and 4th, 2008 and the International Planetarium Society's conference in Chicago from June 27th through July 2nd 2008 to screen their trailer. The preview will highlight some of the over 140 hours of footage of reenactments, interviews with leading astronomers and historians,

and b-roll from observatories around the globe that have gone into the production. Producer Kris Koenig, and Videographer Anita Ingraio, will present the trailer at two Interstellar Studios' co-hosted receptions in St. Louis. They look forward to discussing the production and outreach plans for the project, answering questions, and celebrating the approach of the IYA2009.

Hope to see you there!

Sierra Nevada Brewing Celebrates IYA with Galileo's Astronomical Ale

2009 will mark the 400th anniversary of Galileo's first telescopic observations of the cosmos. In celebration of this new era in astronomy, Sierra Nevada Brewing Co. proudly presents Galileo's Astronomical Ale. The debut of this limited selection ale, presented by Interstellar Studios for the *400 Years of the Telescope* reception, will take place at the 212th American Astronomical Society Meeting/Astronomical Society of the Pacific, International Year of Astronomy Symposium in St. Louis Missouri, on June 3rd and 4th.

Galileo's Astronomical Ale is a light bodied beer that resembles a lager, but has a distinctive malty character that is dry and crisp in the finish yet leaves a slight hint of a gentle honey sweetness.

Sierra Nevada Brewing Co. was founded in



1980 and is one of America's first microbreweries. It is regarded as the standard of quality for American craft brewers and has won numerous awards for its beers and ales. The brewery is still 100% owned by Ken Grossman. Interstellar Studios would like to thank Sierra Nevada Brewing Company and Ken Grossman for his support.

www.sierranevada.com

IYA Update

New Single Points of Contact

The IYA2009 is growing; presently we have 117 National Nodes (62 of which have National dedicated web site) and 20 Organisational Nodes. A warm welcome to: Bosnia-Herzegovina, Mongolia, Saudi Arabia, Iraq, Dominican Republic, Luxembourg and the International Astronautical Federation.



[Continued on page 5](#)

Generous Celestron Sponsorship



Celestron has recently announced their partnership with the 400 Years of the Telescope team at the PBS Showcase event in May. Celestron will provide 8-inch CPC 800 GPS XLT® telescopes to key participating PBS affiliates to support their outreach efforts associated with their regional science centers and planetariums during 2009. As part of a coordinated effort between the *400 Years of the Telescope* documentary, *Two Small Pieces of Glass* planetarium show, the Astronomical Society of the Pacific and the NASA Night Sky Network along with selected PBS stations, regional star parties will be held with the purpose of providing opportunities for everyone to look through a telescope. The stations will promote the planetarium program and star parties

[Continued on page 6](#)

400 YEARS *of the* TELESCOPE

Getting ready for International Year of Astronomy 2009

Centro de Radioastronomía y Astrofísica (CRyA), UNAM Morelia, Michoacán, México

Yolanda Gómez
CRyA, UNAM
y.gomez@astrosmo.unam.mx

Our Center is coordinating the activities that will take place in this state of western Mexico on the occasion of the International Year of Astronomy (AIA2009). As a first step, a state committee has been formed with the collaboration of professional and ama-



Press conference to inform on the creation of the state committee and the February 20 total lunar eclipse. From left to right: Javier Ballesteros, Yolanda Gómez, and Donaciano de Anda.

teur astronomers, as well as of the science institutions in the state. This committee is formed by representatives of CRyA-UNAM, the Outreach department of the Morelia Campus of UNAM, the State Council of Science and Technology (COECyT), the Morelia Planetarium "Felipe Rivera", the Michoacán Society of Amateur Astronomers (SAMAC), the Physics Institute and the School of Physics of the State University (UMSNH), the Colegio de Michoacán in Zamora, and the Research Center of Michoacán (CIDEM).

Already during 2008 we will be doing preliminary activities for 2009 with the purpose of preparing the public and the press for the International Year of Astronomy. As many other groups, we took advantage of the total lunar eclipse of the past February 20th, visible in most of Mexico, to start activities. A press conference was organized for February 13, where the creation of the state committee was announced and the public was invited to view the eclipse from the UNAM campus. The observation of the eclipse was a big success, with a conference on eclipses by Dr. Javier Ballesteros of CRyA, as well as children's activities in the site. We estimate that around 700 people attended the event. Many of the participants brought their own telescopes and the help of the amateur astronomer community was very valuable. This event received good coverage from the press.

The main goal of the state committee is to popularize astronomy in the state of Michoacán, during 2009. The basic idea is that as many people as possible can observe the sky with a small telescope, as first done by Galileo Galilei four hundred years ago. Morelia is the state's capital and has a population of one million inhabitants. However, the committee will cover not only the capital city but the other large cities in the state: Uruapan, Zamora, Pátzcuaro, la Piedad, and Zinapécuaro.

Activities for 2008.

We are organizing cycles of popular conferences, telescope building workshops, workshops to learn how to use a telescope properly, and astrophotography seminars.

We are also working on the preparation of material for the 2009 activities. These materials include a brochure of astronomical ephemerides for 2009, a calendar of *Michoacan Astronomy*, a new version of our successful "Astronomical Lottery", and astronomy posters for ambulatory expositions. We are also working on the translation from Latin to Spanish and the publication with commentaries of the *Tractatus de Sphaera* of Giovanni Campano de Novara, the first western "textbook" of astronomy used in the Americas. This teaching took place in the School of Advanced Studies of the Augustine friars in Tiripetio, Michoacán, starting back in 1540. We have a web Page, where additional activities are being incorporated (www.astrosmo.unam.mx/aia2009).

Activities for 2009

During January an inaugural ceremony of the International Year of Astronomy will take place with the participation of representatives of the State Government. The precise date is not established yet.



Amateur astronomers showing the moon to the public.

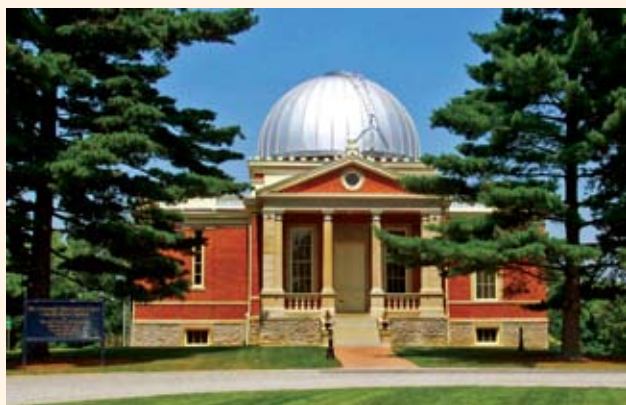
We will undertake several public conference cycles for the following programs: *Science for children and their fathers* (Ciencia para niños y sus papás), *Thursdays in Science* (jueves de ciencia at CIDEM), a conference cycle in the Morelia Planetarium organized by the SAMAC (second Friday of each month), the *Market of Science* (Tianguis de la Ciencia at the UMSNH). These conference cycles are well established yearly activities, but during 2009 they will be focused on astronomy. With the purpose of reaching other cities

Continued on page 6

Featured Observatory

The vintage observatory: Thriving in the 21st Century

The weekend of May 2-4, representatives from nearly fifty regional, national and even international observatories gathered at the Cincinnati Observatory Center (COC) for a first-of-its-kind conference on saving historically significant observatories.



The Cincinnati Observatory Center

The Cincinnati Observatory was the first public observatory in the nation (1842) and at one time faced possible destruction. Thanks to support from area preservationists, historians, educators, the University of Cincinnati and the astronomy community, the Cincinnati Observatory was saved

from the wrecking ball and has become the center for K-16 astronomy and space science education in the area. Due to the tremendous work by staff, members and volunteers over the past ten years, the Cincinnati Observatory has become nationally recognized for rescuing a vintage observatory and finding a mission for it in the 21st century by serving the community as an educational resource. Still owned by the University of Cincinnati, the Observatory has been managed since 1999 by the Cincinnati Observatory Center as a separate non-profit. Since 1999 attendance has grown from barely 1,500 to nearly 20,000 visitors a year. About half those numbers are K-12 students. In recent years the Observatory has expanded its collaboration with the University by offering training and classroom support for UC students who are future science and math teachers.

The idea for “The Vintage Observatory” conference was originally conceived over a year ago by COC Director Craig Niemi and science historian / writer Trudy Bell. Bell has been active for many years in the Antique Telescope Society (ATS), an international organization dedicated to the preservation of historic telescopes. “The conference expands ATS’s role to include the often beautiful and architecturally significant buildings and grounds that housed these magnificent telescopes,” cites Bell. The response to the conference exceeded expectations. “We evidently touched a nerve with this topic,” said Observatory Director Craig Niemi. “The response can also be attributed in part to interest being generated with 2009 being the International Year of Astronomy and the 400th anniversary of the invention of Galileo’s telescope.”

The three-day conference was open to the directors and caretakers of 19th and early 20th century observatories. Participants included the Detroit Observatory which dates back to 1854, Indiana University, Williams College, the University of Virginia, Harvard University and the University of Free State in South Africa. Attendees were treated to some of the best Cincinnati has to offer, including

[*Continued on page 6*](#)

2009, the International Year of Astronomy, one month at a time

Suzy Gurton

Education Manager

Astronomical Society of the Pacific



The Astronomical Society of the Pacific (www.astrosciety.org) oversees the Night Sky Network (nightsky.jpl.nasa.gov) for NASA through a variety of grants and contracts. Working closely with the NASA Origins Forum (origins.stsci.edu), a list of twelve topics and featured objects has been compiled that will guide NASA’s special efforts during IYA2009 (see astronomy2009.nasa.gov/news.htm). This provides a great framework to link many outreach activities to a national theme. The Night Sky Network (NSN) will unveil activities each month in the featured Sampler portion of its web site. These activities will be inspired by either the topic or featured object for the month. A full write up of the activities, handouts for your audiences and even training video clips will be available through the Sampler. Night Sky Network clubs will all access to all 12 months of resources in advance, but the public side of the web site will unroll them, one month at a time.

Leading off in January with telescopes as the topic provides a great opportunity to link to the *400 Years of the Telescope* program to this NSN effort and will give us the opportunity to develop some unique demonstrations on the topic. Keep an eye on all these web sites and look for a club in your area (nightsky.jpl.nasa.gov/club-map.cfm) that may be taking advantage of all that IYA has to offer!

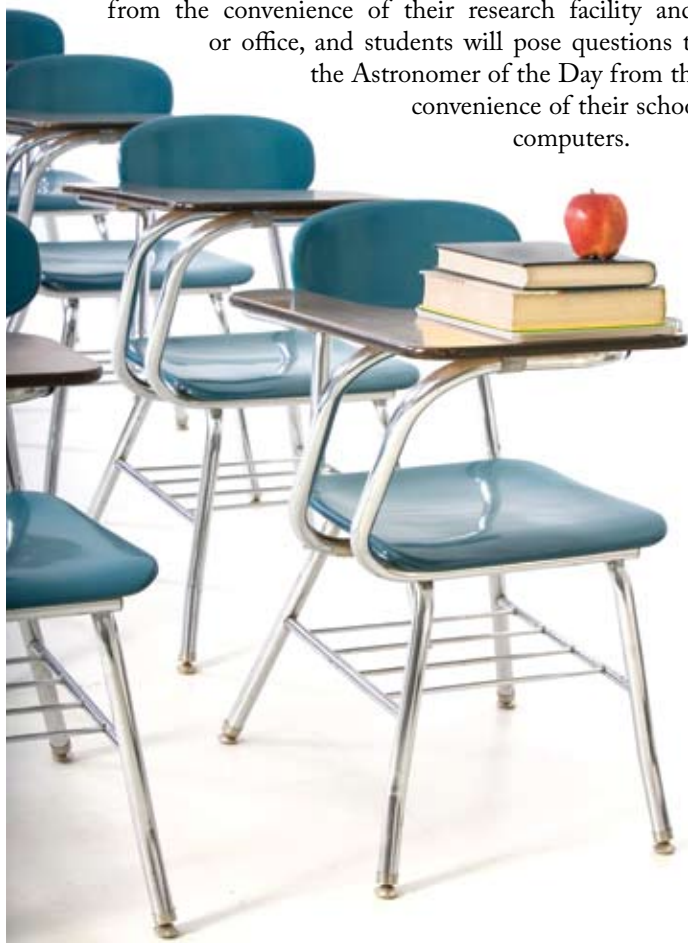
Questions? Contact the Night Sky Network coordinator through this link:

nightsky.jpl.nasa.gov/contact.cfm

Astronomer in the Classroom Program

Interstellar Studios and 21st Century Learning are sponsoring a new program, *Astronomer in the Classroom*, in support of the IYA2009.

The *Astronomer in the Classroom Program* will provide astronomers and students the opportunity to interact, in real-time, during the International Year of Astronomy 2009. Astronomers will present their recent research and communicate directly with students from the convenience of their research facility and/or office, and students will pose questions to the Astronomer of the Day from the convenience of their school computers.



Using Abode® Connect, a web conferencing solution, Interstellar Studios and 21st Century Learning will host three ½-hour webcasts every school day in 2009. The webcasts will be conducted at the same time each day, to accommodate national time zone differences and grade levels, allowing educators to drop-in when their curriculum and testing schedules allow it.

A schedule of participating astronomers will be posted with brief descriptions of the lectures allowing both the student and teacher a chance to plan for the webcasts in which they would like to participate. Adobe® Connect will allow the presenter to be viewed and heard over the web, as well as run a PowerPoint® presentation live. Students can interact by posting their typed questions to the conference.

Graduate students, post docs or active researchers who can give three hours to this worthy cause are invited to volunteer. The program requires one hour of prep to create the presentation, ½-hour to upload and test the provided webcam and 1 ½-hours to do the three webcasts, and the required equipment, a webcam and headset, will be provided by Interstellar Studios.

No special training is needed. Astronomers who are passionate about their work and like to tell others about their research and institution have already met the most important criteria for participation. Volunteers are simply asked to keep in mind the grade levels being lectured to, and to describe the subject matter with appropriate language and vocabulary.

For astronomers whose institutions are expected to perform outreach, and /or participate in the IYA2009, the *Astronomer in the Classroom Program* offers a convenient, high-impact means to meet those objectives. Being a part of an accessible program that provides real life interaction with astronomers, and inspires many students to pursue science careers, is a rewarding experience for everyone.

For teachers who wish to get involved in the IYA2009, the *Astronomer in the Classroom Program* offers an accessible and exciting avenue for their students. Students rarely have the opportunity to interface with professional astronomers, and will benefit from their experience, both through their exposure to professional scientists and through their use of modern technology.

Interstellar Studios
(530) 343-5635

Jennifer Oman, *Director of Communications*
jennifer@interstellarstudios.com

Kris Koenig, *Producer*
kris@interstellarstudios.com

Sponsors: Interstellar Studios and 21st Century Learning



Finding Darkness Online

by Pamela Gay
Southern Illinois University at Edwardsville
US IYA New Media Chair

As the International Year of Astronomy approaches, the goal of supporting dark skies online is being planted in the fertile minds of numerous online content providers. At this time, Dark Skies

Awareness: Online Edition crops up in three areas of the IYA new media: Second Life, Social Networking, and the 365-Days of Astronomy podcast.

The US-IYA program in Second Life, led by Adrienne Gauthier, will take advantage of 3-dimensional virtual reality to cheaply build replicas of real world astronomy demonstrations. Of particular interest to the dark skies conservation community is a plan to build a venue where users can switch light controls to change between IDA approved (simulated) lighting systems and non-approved (simulated) lighting systems, and see how these two systems light up their surroundings and also affect the user's avatar's ability to view virtual stars. While this type of a demo is impractical in the real world due to costs and lack of portability, in Second Life it can be carried out wherever a laptop can travel. Initially constructed for IYA on IYA property, this demo can be replicated in other areas of Second Life at minimal cost. If you are a Second Life landowner and you are interested in hosting this or any other IYA related events on your property, contact newmedia@astronomy2009.us to find out how to get involved.

From virtual worlds to real world iPods and other portable media players, IYA seeks to invade all the Internet enabled gadgets in your life. One of the premier projects of the IYA New Media Task Group is their *365-Days of Astronomy* podcast. Led by Emily Lakdawalla, Martin Ratcliffe, Alice Few and Pamela Gay, this project will produce an 8-12 minute podcast for every day of 2009. Show topics will include great moments in manned space flight, the history of astronomical discoveries, sky events, astronomy in arts and entertainment. As part of the series, several episodes on dark skies awareness will be produced, including episodes commemorating the passage of lighting restriction legislation, episodes on *The GLOBE at Night* program and its results, and an episode on *Earth Hour*. To make this project a reality, the *365-Days of Astronomy* team is seeking volunteer scriptwriters and podcasters. This is a community-based project that will bring together the voices and words of the astronomers from across the Internet. To get involved, contact info@365DaysofAstronomy.org. Shows will begin recording in November of 2008.

To help build a community out of the momentary experiences people have in Second Life and while listening to podcasts, the Dark Skies Awareness team and the IYA New Media team are building social networking groups on major social networking sites, including Facebook and MySpace. Today, you can become friends with IYA or Dark Skies. For a complete listing of IYA related social networking sites, visit astronomy2009.us/besocial.

All of these programs rely on your support. To help make the IYA program a reality through personal or corporate sponsorship, visit astronomy2009.us/support or email donate@astronomy2009.us. The IYA is a 501(c)(3) under the auspices of the AAS and your contributions are tax-deductible where permitted by law.

IYA continued from page 1

Galileoscope IYA2009 Cornerstone Project

The Galileoscope conceptual design study has been concluded after many months of work! More info: <http://www.astronomy2009.org/files/reports/GalileoscopeProgressReport.pdf>

Upcoming IYA2009 meetings:

Our colleagues in the United States have prepared a huge meeting dedicated to the IYA2009, during the AAS 212th and ASP Meeting (St. Louis, USA), 31 May - 5 June 2008. <http://www.astro.society.org/events/meeting.html>

Upcoming IYA2009 meetings:

- APRIM2008 (Kunming, China), 3 - 6 August 2008 - <http://aprim.ynao.ac.cn/>
- JENAM2008 (Wien, Austria) - 8-12 September 2008 - <http://www.univie.ac.at/jenam2008/> or <http://www.roe.ac.uk/ukatc/test/symposium.html>

The Communicating Astronomy with the Public Journal #3 is out!

In this edition the contributions cover the full spectrum of astronomy communication from forefront technology to the fine art of communicating controversy. www.capjournal.org

Essential Astronomy Quick Reference Guide for Outreach

This resource is meant to be a quick reference guide for people doing any form of astronomy outreach. It is meant to cover some of the most common questions that are asked during any astronomy presentation. Hence it has been dubbed the *Essential Astronomy Quick Reference Guide for Outreach*. <http://www.astronomy2009.org.za/projects/astroguide/>

Pedro Russo
IYA2009 Secretariat
IYA 2009 Coordinator
International Astronomical Union
e.prusso@eso.org

400 YEARS *of the* TELESCOPE

Cincinnati continued from page 3

Graeter's ice cream, Skyline chili and Montgomery Inn's ribs.

Topics included: "Rescuing an Observatory: Where to Start", "Restoring Historic Instruments", "Seeking National Landmark Designation" by Cincinnati Preservation Association preservation director Margo Warminski, "Fundraising for Vintage Observatories" by observatory neighbor and professional fundraiser Lyn Marsteller, "Documenting Your History", "Publicity & Public Relations" by Greg Hand of UC, and "Educational Programming utilizing Vintage Instruments".

"The Cincinnati workshop was fantastic!—in content both historical and "how-to," and in the opportunity to meet and brainstorm with others with shared enthusiasms and problems. It was informative not only to ATS members, but a real service the ATS provided in being a

Celestron continued from page 1

in conjunction with the broadcast and re-broadcast of the documentary. Celestron's donation ensures that the stations will have incentives to encourage public participation.

Celestron is an award winning telescope maker, and leading designer, manufacturer and importer of high-quality optical products including computerized and non-computerized telescopes.

400 Years of the Telescope partners would like to formally thank Celestron for their contribution and support that will enable more people to have the opportunity to experience a view of the universe through a telescope in 2009!

To learn more about Celestron, please visit their website: www.celestron.com.

Michelle Meskill

Celestron

Assistant Marketing Manager

310-328-9560 ext. 205

mmeskill@celestron.com

clearinghouse for strategies that could put vintage observatories on sounder footings," notes Sara Schechner, PhD, Department of the History of Science.

Harvard University

Many wonderful old observatories are facing a dire future and it's hoped that showcasing the Cincinnati Observatory's success can serve as a model and resource for others. "The Cincinnati Observatory is a wonderful model of what is possible to accomplish given vision and hard work, and I'm sure it was inspiring to folks from the other observatories that were in attendance," says Ken Launie, President of the Antique Telescope Society.

Yet despite its successes, Cincinnati Observatory's future is not guaranteed. "The University of Cincinnati has generously supported the Observatory's renovation, operations and programming since 1999 when the COC took control. That sup-

Mexico continued from page 2



besides Morelia, we already count with the support of twelve technology institutes in the state where the activity "One day of astronomy" (Un día de astronomía), will take place. In this last activity we will include an astronomy conference plus workshop and telescope observations in the evening. In these activities outside Morelia, we will also take large size posters with astronomical themes that will be exposed in the main squares of these cities. Finally, we will also make a cycle of movies with an astronomical background and after the projection a group of experts will offer a comment and answer questions from the public.

port agreement expires January 2009 and while signs are very optimistic that UC will continue to support the Observatory beyond that date there are no guarantees to the level or duration of that support," says Niemi. "Dating back to mid 1800's means we have a generational appeal and to ensure that future generations can take part in the tradition and programming of the Observatory will also require generous support from members, local foundations and donors."

400 Years *of the* Telescope Newsletter

Volume 1 Issue 5

June 2008

400 Years of the Telescope newsletter is a production of Interstellar Studios, a digital media production company with a focus on astronomical, educational and cultural programming. All contents are copyright of Interstellar Studios.

Editorial Team

Executive Producer

Kris Koenig

Editors

Jennifer Oman

Anita Ingrao

Design & Production

Michael Moretti

Contact

jennifer@interstellarstudios.com

Interstellar Studios

11 Ilahee Lane

Chico, California 95973

(530) 343 5635

Current Production

"400 Years of the Telescope: A journey of science, technology and thought"

www.400years.org

Please click [here](#) to subscribe.