

Observatory News

April 2010
513-321-5186

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wcartw@aol.com



Coming Up At The Observatory....

Apr 01 7:30pm Friends of the
Observatory Monthly Meeting
Apr 02 8:00pm FOTOKids Youth
Astronomy Club
Apr 03 8:00pm Venus & Mercury
Together
Apr 08 8:00pm Astronomy
Thursday
Apr 09 8:00pm Astronomy Friday
Apr 11 1- 4:00pm Historical Tours
of the Cincinnati Observatory
Apr 11 8:00 pm A2Z Astronomy
Class for Members (Sunday session)
Apr 12 8:00pm A2Z Astronomy
Class for Members (Monday
session)
Apr 14 "First Light" 165th
Anniversary of the Mitchel
Telescope
Apr 15 8:00pm Astronomy
Thursday
Apr 16 8:00pm Astronomy Friday
Apr 17 9-11:00pm Saturn Day-The
Remarkable Ringed Planet
Apr 19 7-9:00pm "Dance of the
Gods" UC Communiiversity
Apr 21 7-9pm How to Use Your
Telescope
Apr 22 8:00pm Astronomy
Thursday

Apr 24 9-11:00pm Saturn Day-The
Remarkable Ringed Planet
Apr 25 1- 4:00pm Historical Tours
of the Cincinnati Observatory
Apr 27 7-9pm "Behind the Scenes
of the COC" UC Communiiversity
Apr 28 8-10pm Introduction to
Astronomy class
Apr 29 8:00pm Astronomy
Thursday
Apr 30 8:00pm Astronomy Friday
* = Communiiversity Course,
call 513-321-5186 or visit
www.cincinnatiobservatory.org for
more information.

The Word from FOTO's President Zoller

Several days ago I was outside around 8pm and saw the thinnest sliver of a "finger-nail" moon hanging in the western sky. Based on the calendar, the moon was slightly more than 48 hours past new. Part of what caught my attention was that the lit portion of the moon was at the bottom of the disk – sort of like the mouth of a "smiley face." It seemed to me that

most times when I see a crescent moon, the lit portion is on one *side* of the disk or the other. The next night, after the FOTO planning meeting, the moon was again setting in the western sky – the lit portion still at the bottom. I took the opportunity to ask Dave Bosse (astronomy instructor at UC and frequent presenter at the Observatory) why the crescent appears to change position relative to the moon's disk. To make a long story short (sorry Dave), he explained that it depends on the position of the moon relative to the celestial meridian. When seen closer to the meridian, the crescent will appear on the side of the moon's disk. Farther from the meridian, it appears near the top or bottom of the disk. All this is based on your latitude on the earth, combined with the earth's axial tilt, the tilt of the moon's orbit, nodes.....

Actually, I'm not here to give you an astronomy lesson. The point is that the Observatory is an incredible source of information just waiting to be tapped. When talking to people while working events, I make a point to emphasize the incredible knowledge base that the Observatory holds. We have volunteer presenters that are

instructors at UC, Xavier, Cincinnati State and NKU. In addition, the level of understanding of astronomy possessed by many of the "amateur" volunteers could qualify them to be instructors.

And it's all there for the taking. Dave Bosse is currently teaching a college level astronomy class (**A2Z Astronomy**) for Observatory members. The class is so popular that a second "section" had to be added to accommodate the number of people who wanted to attend. Along with our regular Thursday and Friday night programs, FOTO Kids and special events such as **Saturn Days** and **Sunday, Sun Day, Sundae**, the Observatory is the place to expand your knowledge of the Universe. Whether your interest is casual or more in-depth, you will find something that meets your needs. I encourage you to take advantage of the educational benefits your Observatory membership provides. While you're at it, bring a friend and introduce them to the wonders of the Universe.

FOTOKids Meeting

By Dean Regas

The next FOTOKids meeting will be Friday, April 2, 8pm at the Observatory. We will begin the meeting by observing the planetary conjunction of Mercury and Venus low in the west. Don't be late because elusive Mercury will set fast! After that we will take out our portable telescopes to view a variety of objects. If you have a telescope or binoculars, be sure to bring it. If it is cloudy we will construct scale models of the solar system. No calculator is necessary. Only a lot of play-dough, a ruler, and some string will do. If you have any questions please contact **Dean Regas** at 513-321-5186 or at deanobservatory@zoomtown.com

FOTO's April Meeting

By Dale Zoller

The April 2010 FOTO meeting will be held on the first Thursday of the month, **April 1** (no fooling) at **7:30pm** in the west wing of the Herget Building at the Observatory. This month's presentation will be "*The Astronomical Instruments of the Cincinnati Astronomical Society (CAS)*" by Observatory historian **John Ventre**. The CAS, the society on the west side of the city, has a rich history that was started in 1911 by Dr. DeLisle Stewart, an astronomer at the Cincinnati Observatory. Since John is the Historian of both the COC and the CAS he is well qualified to describe the history of CAS's astronomical instruments.

Don't forget, we also have an informal dinner before the meeting around 6pm at Panera Bread in Hyde Park Plaza.

March 2010 FOTO Meeting Highlights

COC Director: Craig Niemi

The new software ("E Tapestry") installed in the office is working nicely for organizing membership data. The new software will also be useful for grant applications.

Membership is currently at 422.

The Museum Committee has been networking with other small museums in the greater Cincinnati area, to pool PR efforts. They will promote each others' events.

An Astroimaging Class will be given by Fred Calvert and Eric Africa on Tuesday evenings; there will be 3 classes.

COC Representative: Scott Gainey

Mike Flick will take over presidency of the COC Board at the annual meeting in May.

ScopeOut 2010

The date is set for Saturday, September 11, 2010.

Our speaker will be **Mike Brown**, discoverer of the dwarf planet Eris.

Planning meetings will begin in April

After the business meeting, the discussion turned to the topic of revising the manner in which FOTO receives its funding from the COC. President Zoller presented a slide show detailing the current funding method (\$20 per new or renewed membership, paid quarterly), the problems it presents for preparing outside funding grants, and proposed a revised method of funding. After a lengthy and spirited discussion, a motion was passed to have the FOTO board pursue a set annual budget from the COC more in line with actual FOTO expenditures. The FOTO board will draft the revised funding document at its March planning meeting. Hopefully, after discussions with the COC, the final wording will be ready for a vote by the FOTO membership at the May FOTO meeting.

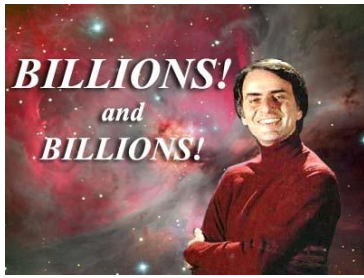
The Planning Meeting

By Dale Zoller

The next FOTO Planning meeting is scheduled for **Thursday, April 22, 2010** at 6 pm at the Observatory. The meeting generally lasts a couple hours. The Planning meetings are open to all FOTO members. We encourage your participation in planning future FOTO activities.

Did You Know....

The February an 8.8 earthquake in Chile shortened the length of our day and speeded up the Earth's rotation by 1.26 microseconds (millionths of a second) by shifting the Earth's mass.



Dave's Excellent Astronomy Class

Sunday April 10th 7-9+ pm
& Monday April 11th 7-9+ pm

Due to popular demand Dave Bosse's A2Z Astronomy Class for members now has two separate sessions, on Sunday and Monday. It's the same course and material on both nights.

The course is college level and is intended for AP high school students and adults but with Dave's terrific teaching style the material is accessible to everyone. It is a casual class and can be picked up at any future date also. Few seats remain so call the Observatory soon to reserve your spot. 513-321-5186.

ScopeOut 2010 Planning Meeting

By Dale Zoller

ScopeOut 2010 is scheduled for Saturday, September 11, 2010. We will have our first planning meeting for ScopeOut 2010 on Tuesday, April 13 at 6:30 pm in the west wing of the Herget Building. We need volunteers to help with organizing all the various activities that make ScopeOut one of the Observatory's signature events.

Did You Know....

The surface of Uranus's moon Miranda is so erratic it looks like it had been put together by committee.

The Observatory Online

By Craig Niemi

To help keep our members and the public up-to-date on Observatory events we've added a new online Calendar. While you're there visit Dean's blog and the What's Coming Up pages for all the latest Observatory and Astronomy news.

For several months now you've been able to quickly, easily and securely contribute, join or renew your membership via the Observatory's website. In the continuing modernization of our infrastructure your online giving will soon be fully integrated to our new membership software so your gifts are automatically and accurately credited to your record. www.cincinnatiobservatory.org/becomeamember.html

Thanks to a generous grant from the *Greater Cincinnati Foundation* you'll be seeing more improvements to the Observatory's infrastructure that will increase our productivity and stretch your contributions even further.

Arriving at Your Mailbox

Keep your eye on the mailbox for the arrival of the *Summer 2010 Orion Telescopes & Binoculars* catalogue which will be released the first week of April. It will feature a full page story written by Marsie Hall Newbold spotlighting Outreach Astronomer Dean Regas and the *Observatory's* tremendously successful "*40 Galileos Starry Messenger Project.*" The program awarded forty 8-inch Dobsonian reflector *Orion XT8* telescopes to participants in the program last year and will continue utilizing the same model over the next three years with the "*Future Galileos Project.*"

The print version will include three photos and directs readers to the *Orion Telescopes & Binoculars* website

(http://www.telescope.com/control/viewCatalog/~category_id=Catalog104b/~pcategory=Imaginova_catalog) for an expanded version and Dean's tips on how to purchase a telescope.

This is a unique opportunity to share our story and create a "buzz" about the Observatory as one of the astronomical community's foremost educational facilities.



Dean with his Orion enjoying the snow melt
(Photo by Marsie Newbold)

Introductory Astronomy Class

At the Observatory
Wednesday, April 28, 8-10 pm

This astronomy course is perfect for beginners who want to learn more about observing the night sky at the historic Cincinnati Observatory.

We will discuss the new and improved Solar System, Moon phases and features as well as identify major stars, constellations and planets. Plus we will show you how to get the most out of your binoculars and telescopes.

Cost: \$15 per person

To register call Dean Regas at: **513-321-5186.**

Stonelick State Park Stargazes

By Craig Niemi

Pack your picnic basket and enjoy a gorgeous springtime afternoon in the park. Then stay and explore all the celestial treasures found in the dark skies of Stonelick State Park.

Stonelick stargazes are a great chance for members, teachers, scouts, and the general public to learn the night sky, learn how to use their telescopes all while enjoying the company of Observatory members. Our thanks to Scott Naylor for all his work in making the Stonelick stargazes a big part of our member and public programming.

www.cincinnatiobservatory.org/stonelickblog.html.

Saturdays

At the Observatory
Saturday, April 17th & 24th
9-11 pm

By Dean Regas

Mars may get the headlines, but no planet is more breathtaking than Saturn.

The Lord of the Rings takes center stage on **Saturdays**.

There will be programs about Saturn, tours of the buildings, and viewing through the historic 1843 and 1904 telescopes (weather permitting). The Moon will also be observed.

Reservations required for the classes at 9 pm and 10 pm.
Please call 513-321-5186.

No reservations are needed for just viewing. Drop-ins welcome.
Cost: \$6 per person.

For more information visit:
www.cincinnatiobservatory.org

Upcoming Communiiversity Classes at the Observatory

By Craig Niemi

For over 10 years the Observatory has been offering classes for “Life-long Learners” through UC’s Communiiversity program. Communiiversity offers adults in Greater Cincinnati learning opportunities in such diverse areas as medicine, knitting, dancing, astronomy, fitness, test preparation and much more.

“Dance of the God’s”

Dr. Terry Flesch
April 19, 2010 7-9 p.m.

“Behind the Scenes”

Craig & Valerie Niemi
April 27, 2010 7-9 p.m.

“Mysteries of the Universe”

Terry Endres
May 3, 2010 7-9 p.m.

“Astronomy 101”

Dean Regas
May 11, 2010 7-9 p.m.

“The Space Shuttle Era”

Bev Ketron, iSpace
May 19, 2010 7-9 p.m.

Cost per course: \$18

To Register or information on future classes: Call UC at 513-556-6932
www.uc.edu/ace/commu/

Drake Planetarium Field Trip!

By Dale Zoller

We have arranged for a special show for FOTO members and volunteers at the **Drake Planetarium** on Saturday, April 17 at 10am. Located in Norwood, OH, the **Drake Planetarium and Science Center** has been providing science education since 1982 to children throughout Ohio, Kentucky and Indiana. The planetarium's

seating capacity is 70 visitors, so there should be plenty of room. A sign-up sheet will be available at the FOTO meeting on April 1, 2010. Mark your calendar now!

March 21st The Spring Equinox



Image of the Sun rising exactly along the east-west oriented Western Canal, in Tempe, Arizona

Worlds Collide Mercury and Venus Conjunction

At the Observatory
Saturday, April 3, 8:00 pm

The two closest planets to the Sun will grace the western skies just after sunset. This is your chance to see elusive Mercury and stunning Venus right next to each other.

The Observatory is hosting the viewing of this rare event with the aid of our telescopes. Don't be late because the planets set quickly. And stay a little later for Saturn viewing.

Cost: \$6 for adults
\$4 for kids

No reservations required. For further information, please call 513-321-5186.

Craig's Corner

By Craig Niemi,

It's with much sadness that we have to let you know of the sudden passing of local astronomer and world renowned telescope maker **Richard Wessling**. We would run into Dick occasionally at events like the annual ScopeOut Fair at the Observatory, at the Cincinnati Astronomical Society and at the Apollo Rendezvous Telescope Fair in Dayton.



We really knew him more by his reputation which extended far beyond Cincinnati and our local amateur astronomy community.

Dick began building his own telescopes at the age of 12 which led to a long and fitting career at US Precision Lens. On several occasions Dick was entrusted with removing, cleaning and aligning the priceless lens of the Observatory's 1843 Mitchel telescope. If you were fortunate to have a mirror or telescope made by Dick you knew that you had one of the worlds finest, skillfully crafted to incredible tolerances, and that you were going to enjoy views of the heavens that would be unequaled.

Building the finest telescopes was one passion, sharing the night sky was another. Dick often gave outreach programs and stargazes

with his hand-made telescopes at the Cincinnati Nature Center, and with the Midwest Amateur Astronomers, shared the wonders of the universe to thousands throughout the region



Dick was featured in the March 22, 1981 Enquirer Magazine article on "Restoring the Great Cincinnati Telescope". The seven page article detailed the late Paul Nohr's efforts to save the Observatory and bring the Mitchel scope back to its original glory. In the article Dick is featured with his hand-crafted "Yellowstone", which at the time was Cincinnati's largest telescope with a finely polished mirror 20" in diameter. It was a lifelong dream fulfilled.

We hope you'll stop by and read the article. It's available on the desk in the lobby of the 1873 building. It's a compelling story of two local giants in astronomy who inspired and mentored many generations of budding astronomers.

His was truly a life of following his passions, whether it was optics and telescope making, skiing, or sharing the universe with others.

Our condolences and best wishes to Noreen and all of Dick's friends and family.

Craig

Did You Know....

The Russian mission Phobos-Grunt is scheduled to launch and land on Phobos next year.

Richard J. Wessling (1935-2010)

By Mark and Carol Stephenson
and Steve and Sue Rismiller

It is with great sadness that we report the passing of Richard (Dick) Wessling. Dick suffered a major stroke on March 7th and passed away peacefully in the early morning hours of March 17th. Dick is survived by his wife, Noreen, Daughter, Diana, son David, one grandson Alex, and a sister, Mary.

Dick was an avid golfer and an accomplished musician (he played the bass fiddle in a local bluegrass band - *The Out to Lunch Bunch*). He was also an expert skier, and served for many years as a ski instructor at Perfect North Slopes. But, Dick was most well known as one of the world's top creators of premium quality telescope mirrors.



Dick made his first mirror in 1965. He joined the Mirror Makers Club at the Cincinnati Observatory and completed a 10" f/6 mirror. It turned out so well that he began making mirrors for others, and in 1991, he established the Pines Optical Shop. For many years Dick worked for US Precision Lens which later became 3M Precision Optics where he was the senior specialist for optical analysis and

testing. He retired from 3M in 2006 to devote his full time attention to Pines Optical.

Dick was active both in local and national amateur astronomy circles. Locally, he served as President of the Cincinnati Astronomical Society, and steadfastly supported public star gazes sponsored by the Cincinnati Astronomical Society, the Cincinnati Observatory, and the Midwestern Astronomers. He performed in numerous capacities for many years with the Association of Lunar and Planetary Observers, including serving as the assistant coordinator of the Instruments Section and head of the Jupiter Section.

Dick worked with the CAS to place a fine 16" f/5.5 mirror in the existing 16 inch telescope. His legendary optical expertise was not confined to mirrors. When the primary objectives of the 1904 16" Alvan Clark and the 1842 11.25" Merz und Mahler at the Cincinnati Observatory Center needed cleaning, it was Dick who came to the rescue. Likewise, Dick performed his magic on the University of Illinois' 12" Brashear refractor's objective when it was being refurbished. Dick was always generous with his time, and enjoyed nothing more than sharing his expertise and advice with newbies and seasoned ATMs alike. On the night before Dick had his stroke, he was working on a mirror, and then observed with his 10.25" f/8 and 16" f/4 Dobs. It is somewhat comforting to know that Dick's last activities were doing the things he loved most: pushing glass and observing.

Like a supernova which, for a time, outshines everything else in the galaxy, and then is gone, Dick's passing leaves a void in the amateur astronomy community which cannot be filled. We will miss you Dick.

Phobos as Taken from the Mars Express



Phobos spans only about 25 kilometers in length and does not have enough gravity to compress it into a ball. Phobos orbits so close to Mars that sometime in the next 20 million years, tidal deceleration will break up the rubble moon into a ring whose pieces will slowly spiral down and crash onto the red planet.

Word of the Month

By Greg Huber

"Barycentre"

March's Word: "Galactic Cluster"

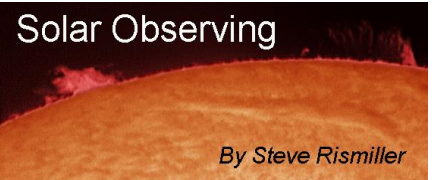
A "Galactic Cluster" is an obsolete term for an open cluster. They were called Galactic clusters because they were measured to be inside the Milky Way Galaxy.

Star Parties

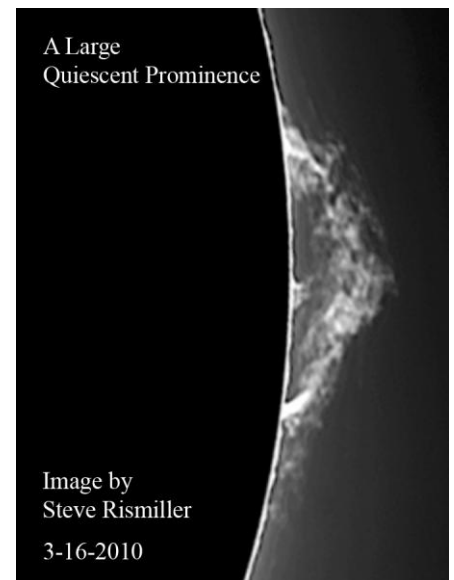
By Scott Naylor

The next scheduled Stonelick Star Parties will be **Saturday, April 10th** and **Saturday, April 17th**.

For directions or for more information phone Scott Naylor at 513-575-5556.

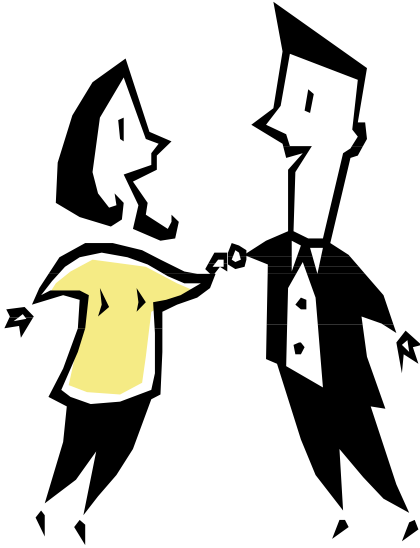


March is here. There is an old saying that says "When March comes in like a lion, it goes out like a lamb". I wonder if that will happen with solar observing? The first week of March began with as many as 4 active regions on the disk at the same time.



The sunspot number peaked at 40 that week. I would consider that a "lion". Then the second week of March was very quiet with no active regions and therefore the sunspot count was zero. On March 12th SOHO observed a comet slamming into the sun never to be seen again. By March 15th an active region became so big that the sunspots could be seen through a filter with the unaided eye. On March 16th a large quiescent prominence rotated into view on the western limb of the sun. It happened to be clear that day and I was lucky enough to get a few images of the prominence. It was huge. It has been estimated that the prominence stretched more than 20 earth diameters from end to end. Only time will tell if March goes out like a lamb.

Welcome
Renewing & New FOTO
and COC Members!



Jerry and Louise Berman
David A. Blevens
Larry Brown and Tina Gutierrez
Brian Calvert
David Clark
Jason Currie
Tim & Patricia Decker
Renee Dierker
David and Nancy Doty
Albert A. Duplace, Jr.
Jean Durbin
Timothy Fair and Selena Reder
Sharon Felton
Carol Friel
Susan Hartman
Jack Hazen
Lee Hite
Robert Hutchison
Kevin and Nancy Kappa
Perrin and Maud March
David and Linda McBride
Leroy Memering
Dianna S. Meredith
Stephanie Mihalek
Jim and Ann Monroe
Denise Mustain
Bill Nelson
Marsie and Tom Newbold
Dan O'Donnell
Cindy R. Pong
Fred Sanborn and Janet Dieman

Christine and Charlie Schiff
Stephanie Simpson
Jeffrey Spain and Nancy Simon
Grant and Mary Stewart
Donald and Sheila Storck
James and Annie Tate
Kara Uhl
Stephen and Nataliya VanOsdell
William Walters
Gary L. Wilkins
Ralph and Maribeth Williams
Everett and Margie Yowell
and Deborah J. Zai

An Invitation from the
Lima Astronomical
Society

My name is Carl Henderson and I am a trustee and web administrator of the Lima Astronomical Society in Lima, Ohio. Our web site is www.limaastro.org

After running the LAS web site for a while I decided to try my hand at creating a social web site for amateur astronomers. I'm really interested in seeing club members from all over Ohio and beyond to join and connect with each other and share experiences knowledge and a lot more.

The site is called Astronomy at Home www.astronomyathome.com I know this a strange name for a social web site. It really started out as different type of astronomy site, but I decided to try something else and I had the domain.

I'm hoping you would pass this along to your members. We have a couple of members from the Mill Stream Astronomy Club in Findlay, Ohio and the Lima Astronomical Society in Lima. We are just starting out so the community really hasn't had a chance to develop yet. I hope your members will be interested in joining and help create a vibrant amateur community. If you have any questions, suggestions or concerns please let me know.

Earth Ecosystem
Similar to Mars



This five-story, blood-red waterfall pours very slowly out of the Taylor Glacier in Antarctica's McMurdo Dry Valleys. When geologists first discovered the frozen waterfall in 1911, they thought the red color came from algae, but its true nature turned out to be much more spectacular.

Roughly 2 million years ago, the Taylor Glacier sealed beneath it a small body of water which contained an ancient community of microbes. Trapped below a thick layer of ice, they have remained there ever since, isolated inside a natural time capsule. Evolving independently of the rest of the living world, these microbes exist in a world with no light or free oxygen and little heat, and are essentially the definition of "primordial ooze." The trapped lake has very high salinity and is rich in iron, which gives the waterfall its red color. A fissure in the glacier allows the subglacial lake to flow out, forming the falls without contaminating the ecosystem within.

The existence of the Blood Falls ecosystem shows that life is indeed possible in the most extreme of conditions. Life could perhaps exist on other planets with similar environments and similar bodies of frozen water - notably Mars and Jupiter's moon Europa.