Upcoming Events
June Calendar

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>Summer Camps (4 weeks)</td>
<td>June &amp; July</td>
<td></td>
</tr>
<tr>
<td>Astronomy Friday</td>
<td>June 1</td>
<td>8:30p</td>
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<tr>
<td>Astronomy Saturday</td>
<td>June 2</td>
<td>8:30p</td>
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<td>Astronomy Thursday</td>
<td>June 7</td>
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<tr>
<td>Astronomy Friday</td>
<td>June 8</td>
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<tr>
<td>Pride Night</td>
<td>June 9</td>
<td>9p</td>
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<tr>
<td>Stonelick Stargazing</td>
<td>June 9</td>
<td>dusk</td>
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<tr>
<td>History of the Observatory</td>
<td>June 10</td>
<td>1-4p</td>
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<tr>
<td>FOTO Member Meeting</td>
<td>June 11</td>
<td>7:30p</td>
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<tr>
<td>Astronomy Thursday</td>
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<td>Astronomy Friday</td>
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<tr>
<td>CosmicKids</td>
<td>June 16</td>
<td>9a-12</td>
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<tr>
<td>Celestial Sips</td>
<td>June 16</td>
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<tr>
<td>Stonelick Stargazing</td>
<td>June 16</td>
<td>dusk</td>
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<tr>
<td>A2Z+ Astronomy</td>
<td>June 17</td>
<td>7p</td>
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<tr>
<td>“Topics In Astronomy”</td>
<td>June 19</td>
<td>7p</td>
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<tr>
<td>“Topics” repeats</td>
<td>June 20</td>
<td>7p</td>
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<tr>
<td>FOTO Planning Meeting</td>
<td>June 21</td>
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<tr>
<td>Astronomy Thursday</td>
<td>June 21</td>
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<tr>
<td>Jupiter Night</td>
<td>June 23</td>
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<tr>
<td>History of the Observatory</td>
<td>June 24</td>
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<tr>
<td>“First Star” book-signing</td>
<td>June 27</td>
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<td>Astronomy Thursday</td>
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<tr>
<td>Astronomy Friday</td>
<td>June 29</td>
<td>8:30p</td>
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<tr>
<td>Astronomy Saturday</td>
<td>June 30</td>
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<tr>
<td>Build a Clock</td>
<td>June 30</td>
<td>1-5p</td>
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<tr>
<td>Sunday, Sun-Day, Sundae</td>
<td>July 1</td>
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<tr>
<td>*Spaceballs</td>
<td>July 16</td>
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<tr>
<td>*How to Use Your Scope</td>
<td>July 17</td>
<td>8p</td>
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<tr>
<td>Saturnay</td>
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<tr>
<td>Marsapalooza</td>
<td>July 27 &amp; 28</td>
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* UC Communiversity

Membership News

by Valerie Niemi, FOTO Chair

Hello Fellow Stargazers,

This month’s article is an “Ode to O. M. Mitchel”, the founder of the Cincinnati Observatory.

Knowing you all love history as much as I do, I assume everyone knows Ormsby has had three towns named after him. Ft. Mitchell, KY is the one everyone knows. The fort was one of seven Civil War fortifications built for the Defense of Cincinnati. The community was later named after Mitchel as he designed the fortifications. (not that they would spell it correctly-no, I’m not bitter).

How many of you have been to Mitchell, Indiana? Prior to becoming director of the Cincinnati Observatory, Ormsby earned a living as a railroad surveyor. The site of this town was originally the intersection of two major railway lines. As the O&M railroad was surveyed, the owners of the land arranged for one of the surveyors (Mitchel, of course) to plat the land in exchange for naming the town for him. The second L was added later.

I guess I should mention that Mitchell, Indiana is also the birthplace of astronaut Virgil “Gus” Grissom.

That didn’t happen until much later, though.

Mitchelville was the first Self-Governed Freedmen’s Town in America. In 1862, prior to the signing of the Emancipation Proclamation, escaped slaves were considered “contraband of war”.

Mitchel created an actual town-rather than the prevalent tent camps- with orderly streets, simple yet accommodating wooden homes, a church and most importantly, gave its inhabitants the freedom to govern themselves.

Map of Mitchelville

Recreation of Freedmen’s Home
General Mitchel was a very busy man in 1862. The Ft. Mitchel fortifications and the Great Locomotive Chase happened early in the year. In May-June of that year, Mitchel was well positioned in north Georgia and advised his superiors that he and his 25,000 troops were ready to march up to Chattanooga and from there on to Richmond to capture the Confederate capitol. Sadly, his plan was not implemented and more than 15,000 of his troops were instead sent to aid General McClellan. Good grief! The war could have ended two years earlier?!

Oddly, Mitchel was not popular among the other generals and on September 16, he was sent to Beaufort, South Carolina. Legend has it Mitchel said “he was sent here to die”. Correct as always, he died forty-five days later on October 30 of yellow fever.

And now you know. Thanks again for all you do for the Cincinnati Observatory.

Pride Night
Saturday June 9th 9-11pm

The Cincinnati Observatory is celebrating Pride Month with a special event in conjunction with NKY Pride weekend festivities! Join us from 9-11pm for tours of the Observatory and viewing through our historic telescopes of the King of Planets, Jupiter! (weather permitting, though the event will be held rain or shine.) Family friendly and all are welcome! No reservations needed. ($5 donation is appreciated to support our Youth Outreach work)

Build-a-Clock
Saturday June 30th 1-5pm

Learn how mechanical clocks work while assembling your very own clock.

Your introduction to clockmaking begins with a tour of the Cincinnati Observatory and a short lecture about timekeeping’s relationship to astronomy.

Then you will sit down at a clockmaker’s bench and the experienced clockmakers from the American Watchmakers-Clockmakers Institute will show you how to assemble your own clock to take home to proudly display on the mantel. No prior experience is necessary. $495 pp. Sign Up Online or call AWCI 513-367-9800.

Jupiter Night!
Saturday June 23rd 9-11pm

Giant Jupiter has returned to the evening sky and you can make a date with the largest planet in the solar system.

Jupiter Night is great for all ages. No reservations required Admission is $10/adult, $5/child, $5/Observatory members

For more info, call 513-321-5186.

Save-the-Dates

June 16: Celestial Sips
July 1: Sunday, Sun Day Sundae
July 21: Saturday
July 27 and 28: Marsapalooza!
Aug 5: Sunday, Sun Day, Sundae
Nov. 8: 175th Anniversary Celebration
Summer Camps Are Sold Out!  
Our thanks to everyone who donated materials & supplies.

It’s Field Trip Season!

Future Astronomer Checking Out Some Sun Spots!  
Academy of Multilingual Immersion Studies, 1st Grade.

Keep Looking Up!  
Dater Montessori, Kindergarten.

A Future Astronaut Celebrates Walking on Venus!
Dater Montessori, 5th grade.

**Save-the-Date!**

**Celestial Sips**  
Saturday June 16th  
8-11pm

Celebrate the Summer Solstice by enjoying a beverage under the starry skies. Celestial Sips, one of the Observatory’s most popular events, will feature wines selected by the experts at The Wine Merchant shop in Hyde Park.

All proceeds from Celestial Sips benefit the Observatory’s programs.

$60 per person  
$50 for Observatory members.  
Ages 21 or older only, please.  
Space is limited and reservations are required, so please call (513) 321-5186 or Sign Up Online.

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**STEM Education Update**  
By Katie Vaughn & Samantha Pepper

**These fun and laid-back single topic classes for beginners focus on a variety of topics and will surely keep you looking up!**

$15 per person $12 for members.  
Sign Up Online or call 513-321-5186.

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**Astro Topics with Dean Regas**

**Uncovering the Sun**  
Tues. June 19th 7pm or Wed. June 20th 7pm

**To Mars & Beyond**  
Wed. July 11th 8pm

**The Planets of Summer**  
Wed. August 15th 8pm
Stargazing at Stonelick
Saturdays – June 9 & 16th

Bring the Family!

Need help with your telescope? Get expert tips setting it up and exploring the night sky. Stargazing begins at dusk. Open to all ages. Stargazes are weather permitting.

“Like” Stonelick Stargazers for weather and holiday schedule updates.

In awe with the beauty of the night sky? Have questions about the Universe? This is where you can get the answers.

Astronomy Evenings include short presentations on a wide variety of topics and plenty of time for your astro-questions. Tours of this National Historic Landmark. And if clear, view the Moon, planets and deep space treasures through the historic 1845 telescope. (Program is held rain or shine)

Astronomy Thursday, Friday and Saturday.
Thursday, June 7, 14, 21, 28
Friday, June 1, 8, 15, 29
Saturday, June 2 & 30

All classes 8:30-10:00 pm.

The topics and the night sky change week-to-week/month-to-month so you can visit often to hear and see something new.

Free for Observatory members! For the latest schedule visit the web calendar then sign up online.

“First Star”
Book-signing

Wednesday, June 27th 7pm

By Will Hillenbrand

Beloved characters Bear and Mole return in First Star, the new picture book for young children by Cincinnati author and illustrator Will Hillenbrand.

In this beautiful and imaginative story, Hillenbrand spins an enchanting tale of friendship, storytelling, and starry nights.

Meet the author, learn about the story-making process, and get your favorite books signed. Copies of First Star will be available for sale or you can bring your own Hillenbrand favorites.

No reservations needed.
Admission: Free

For more information please call 513-321-5186.

Lifelong Learning

Enrich your life with UC Continuing Education’s exciting array of noncredit short, yet in-depth courses and educational opportunities designed for diverse audiences of all ages.

Spaceballs
Monday July 16th 8-10pm
$35 per person

How to Use Your Telescope
Tues. July 17th 8-10pm
$35 per person

To register call 513-556-6932 or select your course(s) online and click Register.

Observatory Historical Notes

By John Ventre, COC Historian

Thank You for the Services in the Delivery of the Merz & Mahler Telescope

At the January 23, 1845 Board of Control Meeting the Directors recorded the following report.

On a Motion of Mr. Taylor it was then Resolved unanimously that the thanks of the Society be presented to the Captain and owners of the Steamboat Yorktown for their care of and attention to the property of the Society, in order to ensure the safe transportation from New Orleans, of their liberality in bringing it without charge, and that Capt. Halderman be made an
honorary member of this Society and presented with a share of its stock.

On a Motion of Mr. Smith it was Resolved unanimously that the thanks of the Society be presented to Messrs. Gray and Campbell of New Orleans for their attention to its interests and for transacting its business without charge and that the thanks of the Society be presented to the Firemen’s Insurance Co., The Cincinnati Insurance Co., The Washington Ins. Co., The Protection Insurance Co., The Manufacturers Ins. Co., The Western Insurance Co., and The Lexington Insurance Co. for their insurance of the property of the Society from Munich to New Orleans and from New Orleans to Cincinnati without premium.

Principal Source: Minutes of the Cincinnati Astronomical Society, Board of Control, January 23, 1845.

Radio Astronomy!

Looking Up brings you the latest astronomical discoveries in a really fun, quick-paced conversation. We cover out-of-this-world topics about planets, stars, and the universe, science and technology, throw in a little pop-culture and bring it all down to Earth.

During each episode, there will be conversations about current astronomical or science happenings, a special guest, then either a Kid Question or a letter from the Observatory’s Crank File – a collection of wild, unusual, far-fetched and conspiratorial correspondences collected through the decades.

Looking Up releases new episodes twice a month, on the 2nd and 4th Wednesdays. Subscribe on iTunes or Stitcher.

Sunday Tours of the Observatory

Sunday June 10 & 24th
Drop in between 1-4pm

Stop by for the whole story or just the highlights. It’s all fascinating and connects our past with your today.

$5 per person.
Free for members.
Group tours by appointment.

New & Renewing Members!

Chris Anderson
and Mary Ellen Finnegan
Robert & Wanda Barger
Jennifer Beach
Douwe and Caroline Bergsma
Jonathon Blickenstaff
Eric and Sarah Brophy
Christopher Clifford
Jason Currie and Michelle Kilcoyne
Billy Davis
Adrienne Donica,
Michael Bast and Maria Donisi
Jeff Dunham,
Justin Dunham
Terry and Kim Endres
Carl Fichtenbaum
Matthew and Jessica Fry
Graham and Laurel Garrison
Stephen Hastings
Richard and Traci Hetzel
Peter Hill
Lesley Gilbertson and William Hurford
Nick Jackson
Alex Herrlein and Betsy Kruthoffer
Paul Franz and Shari Loo
Joseph and Georgiann Meale
Leila Morgan
Eric Roman
Charles and Sarah Seibert
Maya Sepulveda
Dana Smith
Rebecca Sowma
Justin and Emily Stephenson
Elizabeth Stone
Marta Tovkach
Jason Van Cleave
Chris and Jane Vandegrift
Jill and Ray Williams
Patti Young
John and Lu Ann Zeszut
Zoe Zeszut
Last year, America witnessed an astronomical event it hadn't seen in four decades - a total solar eclipse. **Chasing the Moon's Shadow**, a presentation by Jeff Hutton, is the story of the expedition of members of Union Church in Berea, Kentucky to view the solar eclipse in Hopkinsville, Kentucky. This includes a realtime movie of reactions to the onset and end of totality.

Jeff Hutton was first brought to the Cincinnati Observatory in 1968 by his father, who encouraged his interest in astronomy. Since then he was hooked. Jeff was introduced to research in astronomy by Dr. David Dunham when he joined other amateurs on local expeditions to observe lunar grazing occultations and to lunar dark halo crater observing with John Ventre in the 1970's. Jeff loves building telescopes but the 'joy of grinding' has always eluded him. A graduate of both Berea College and of Xavier University, Jeff retired a year ago as a program director for Xavier University. He and his wife, Reda, are planning a move later this year to their dream location: a dark-sky location in the Appalachian Mountains where he plans to continue woodworking, observing the sky and continued involvement in astronomy education.

Please join us on Monday, June 11, 2018 at 7:30 PM at the Observatory for Jeff's presentation.

## A2Z+ Astronomy

### "Planetary Nebulae"

**Sunday, June 17th**

**7:00 pm**

**By Dave Bosse**

Everyone always gets excited about supernovae, stars that go boom at the end of their lives. Not every star ends in one of these cosmic explosions, in fact very few actually do. Stars like our Sun will not go out in a supernova blaze of glory, but will go through a kind of slow-motion explosion that leaves interesting and beautiful remains, Planetary Nebulae. Stars less than eight solar masses, most stars, after expanding through a Red Giant phase and before fading slowly over time as a White Dwarf will pass through a Planetary Nebula phase.

The June edition of the A2Z+ Astronomy class will cover this phase of stellar evolution. How Planetary Nebula come to be and what becomes of them. Why are they are called Planetary Nebula when they have nothing to do with planets?

The A2Z+ Astronomy class meets the third Sunday of each month at 7:00 P.M. in the West Wing of the Herget Building (June 17th, 7:00 P.M.). Discussions cover contemporary Astronomical topics as well as those historic. No pre-requisite knowledge of Math or Astronomy is necessary. The group meets for about an hour or so and is free to any member of the Observatory.

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### Amazon “Smiles”

**On the Observatory**

Amazon will donate 0.5% of the price of your eligible purchases to the Observatory whenever you shop on **AmazonSmile**. Next time you shop at Amazon start at [http://smile.amazon.com/ch/31-1665954](http://smile.amazon.com/ch/31-1665954).

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### Borrow a Telescope!

**By Dean Regas**

As a member of the Observatory, you can borrow a scope though the Telescope Loan Program. For more info please call Dean at 513-321-5186.
According to Spaceweather.com, sunspots are becoming scarce. So far in 2018, the sun has been blank almost 60% of the time, with whole weeks going by without sunspots. The fact that sunspots are vanishing comes as no surprise. Forecasters have been saying for years that this would happen as the current solar cycle (“solar cycle 24”) comes to an end. The surprise is how fast. “Solar cycle 24 is declining more quickly than forecast,” according to NOAA’s Space Weather Prediction Center. This plot shows observed sunspot numbers in blue vs. the official forecast in red. This close-up of the graph shows sunspot numbers have nearly reached zero for this cycle. It’s important to note that solar minimum is a normal part of the sunspot cycle. Sunspots have been disappearing (or nearly so) every ~11 years since 1843 when German astronomer Samuel Heinrich Schwabe discovered the periodic nature of solar activity. Solar minimum is almost here.

For New Members

Become a Friend of the Observatory (FOTO) and join our family of amateur astronomers, history buffs, donors and volunteers. FOTO meets on the Second Monday of the month at 7:30 pm at the Observatory. All members and their guests are welcome to attend.

Your benefits include:
- Discounted or free admission to Friends of the Observatory (FOTO) programs
- Member’s only classes and programs
- Loaner telescopes
- Free admission to Astronomy Thu/Fri/Saturdays
- Discounts in the Gift Shop
- Free admission to the historic landmark buildings and permanent collections.
- Use of the FOTO lending Library.
- One-year subscription to the monthly FOTO e-newsletter
- Members-Only Facebook Page

For more information, call the Observatory at 513-321-5186.

John Ventre was honored by the COC Board for his long and invaluable service to COC. See elsewhere in this newsletter for other COC announcements.

FOTO has purchased a new projector which is kept in the Herget West Wing Classroom. If you need this projector for an off-site FOTO presentation, please notify Valerie Niemi, FOTO Chair, who will keep a calendar to make sure the projector will be available when needed. Ms. Niemi can be contacted at valerieniemi@gmail.com.

Our speaker was Terry Endres, FOTO/COC Representative and instructor of Astronomy at University of Cincinnati Clermont: “Our Growing Understanding of Galaxies”. Mr. Endres gave a very nice overview of what is known about how galaxies form.

Highlights of the May 14th FOTO Meeting

By Michelle Lierl Gainey, FOTO secretary

Craig Neimi, COC Director and JoAnne Pedersen, FOTO Representative to COC Board, reported on the recent Annual Meeting of the COC Board.
Our open-to-the-public (and free for members!) Thursday & Friday Astro Evenings; Late Night Date Nights; Sunday Sundae; Saturn Day; Weekday & Sunday Tours are all unique events that aim to inspire and entertain young and old.

We hope you will come by and experience what is the best science and history programing in the region.

Have out-of-town guests visiting this summer? Be sure to share your remarkable Observatory with them!

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A New, Old ‘Scope

By R. A. Davis, Ph.D., Observatory Curator

The largest telescope at the Cincinnati Observatory is the one immediately under the Dome of the larger of the two buildings on the crest of Mount Lookout. Completed in 1904, this scientific instrument was designed and built by Alvan Clark & Sons, of Cambridgeport, Massachusetts (near Boston). That firm were the foremost telescope-makers in the United States at the time. As in all refracting telescopes, there is a big lens at one end. It is called the “objective lens”, and it gathers the light received from the heavens. At the other end of the telescope is a small, interchangeable lens. It focusses and enlarges the image projected by the main lens so that the image is visible to the human eye (hence, it is called an “eye-piece” or “ocular lens”). The objective lens of this, the largest refractor at the Observatory, is 16 inches in diameter (some 40 cm), and the tube is 22 feet long (nearly 7 m).

Now the big ‘scope has a “baby sister”! In April of the current year, a long-time friend of the Observatory donated a “new” Alvan Clark refracting-telescope. It is a much smaller instrument: The visible diameter of the main lens (called the “clear-aperture”) is a mere three inches (just under 8 cm), and the tube is only some 35 inches long (about 88 cm).

Although inscribed “ALVAN CLARK & SONS”, the telescope is neither numbered nor dated; hence, we are not certain of its exact age. The address inscription, “CAMBRIDGE, MASS.” (rather than “Cambridgeport”), suggests it is younger than the 16 inch instrument. ----- However, it certainly is over a century old.

The “new” telescope itself definitely is an “Alvan Clark”, however, the mount and the wooden tripod appear to have been made later than the tube itself. Indeed, the tube has two holes in it that seem originally to have allowed the telescope to have been fastened to a different mount.

The “new” telescope is a significant addition to the Observatory’s collection of scientific instruments. Research is under way to reveal more information. It may turn out that the newly donated device is even more significant than is now apparent.

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The Observatory by Day

The Cincinnati Observatory is hosting weekday tours of our National Historic Landmark.

The tours are held at 1pm, 2pm and 3pm Monday through Friday.

Tours include both of the observatories and telescopes, including the Mitchel telescope—the oldest public telescope still in use in this hemisphere.

$5 per person. Would you like to to schedule a group up to 12? Sign Up Online. Call 513-321-5186 for more information.

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Astronomy Nights

Thursday, June 7, 14, 21, 28

Friday, June 1, 8, 15, 29

Saturday, June 2 & 30

All classes 8:30-10:00 pm Free for Observatory members!
Observatory Chosen for Fresh Thyme Initiative

By Anna Hehman

The Fresh Thyme store located in Harpers Station has chosen The Cincinnati Observatory as a beneficiary of the Fresh Thyme Giving Bag Program!

Simply buy the Giving Bag with the Giving Tag and we will receive a $1 donation. This is a great opportunity for us to raise money – and help save the planet! - simply through the sale of a reusable shopping bag. Please go to the store, and buy a few bags!

For more information about the Fresh Thyme Giving Bag Program, visit freshthyme.bags4mycause.com

FOTO Planning Meeting

Thursday, June 21st 7pm.

Help plan programs and events for your fellow members. Open to all.

FOTO Committee Officers

Chair-Valerie Niemi
Vice Chair-John Blasing
Secretary-Michelle Gainey
Treasurer-Al Scheide
Member Representatives to the COC Board:
  Dave Bosse
  JoAnne Pedersen
  Terry Endres
To contact an Officer or Rep email craig@cincinnatioskymah.com and I’ll forward your contact information on to them.

The Observatory Staff:

Craig Niemi, Executive Director
craig@cincinnatiobservatory.org

Dean Regas, Outreach Astronomer & Volunteer Coordinator
dean@cincinnatiobservatory.org

Anna Hehman, Development Director
anna@cincinnatiobservatory.org

Kelsey Stryffe. Admin. Assistant & Docent
kelsey@cincinnatiobservatory.org

Katie Vaughn, Outreach Educator
katie@cincinnatiobservatory.org

Samantha Pepper, Outreach Educator
samantha@cincinnatiobservatory.org

John Ventre, Historian
john@cincinnatiobservatory.org

Connect to Your Observatory

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Cincinnati, OH 45208
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cincinnatiobservatory.org

Social Media

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Follow us on Twitter
Enjoy our photos & videos on Instagram.

Our Partners in Science, Sustainability & Local History