



The Green Bank Observatory is home to the world's largest fully-steerable telescope, the Robert C. Byrd Green Bank Telescope (GBT). Astronomers from all over the planet use the GBT to investigate everything from the properties of near-earth asteroids to the extreme physics of the environments surrounding super-massive black holes. Breakthrough Listen, the most comprehensive campaign to search for technosignatures from other civilizations in the Universe is also a regular project on the GBT!

The Green Bank Observatory is like a high-tech village. Skilled engineers, technicians, computer scientists, machinists and mechanics ensure that the GBT always functions at the top of its capabilities. We cordially invite you to visit, explore the science center, and take a tour! If you have time, try one of our behind the scenes tours.

Be a part of our Science!

Making a gift to the observatory supports our daily operation and mission including our Education and Public Outreach programs which reach nearly 10,000 students annually. All donations and memberships can be made in honor of- or in memory of- and are wonderful gifts for any science lover!

To learn more about advancing our mission, visit our website or call 304-456-2011

greenbankobservatory.org/engage

Green Bank Observatory
P.O. Box 2
155 Observatory Road
Green Bank, WV 24944

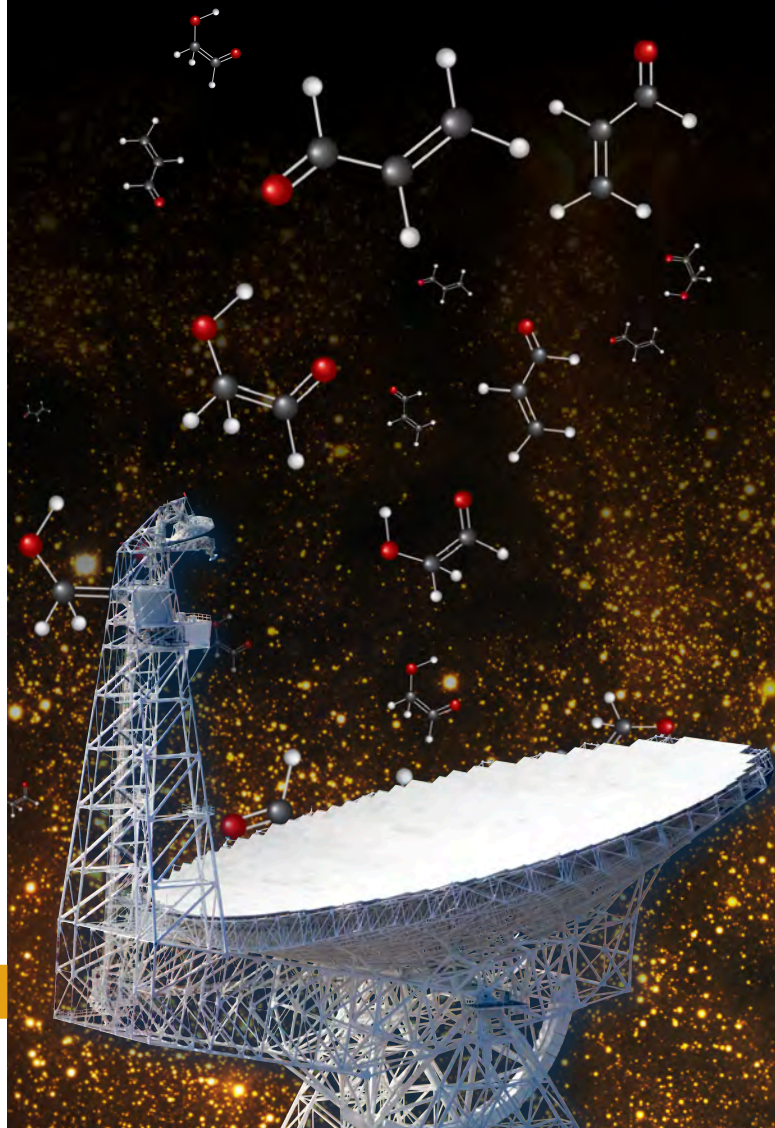


    @GreenBankObservatory



2020

GREEN BANK SCIENCE CENTER



Visit us today!

304-456-2150

greenbankobservatory.org



What to Do!

TAKE A TOUR

We offer a variety of tour options - our popular Site Tour, a History Tour, the SETI and High Tech Tours (where you can get “behind the scenes”), you can even take a self-guided walking tour on miles of trails. Just make sure you turn your phone or digital devices off!

VISIT THE EXHIBIT HALL

Discover how radio astronomers learn about the Universe. Interactive exhibits and fascinating facts await you inside a huge Faraday cage. Don’t know what a Faraday cage is? Ask one of our Science Center Staff or take one of our fascinating Tours!



HAVE A BITE

Dine at the Starlight Café

Enjoy a selection of fresh foods and treats at our own award-winning café. Generous portions and affordable prices! Take advantage of our special menu and pricing for groups of 20 or more.



greenbankobservatory.org/visit/starlight-cafe/

SHOP

The Galaxy Gift Shop offers apparel, collectibles and the best variety of educational toys around! Indulge your inner scientist!



Not only do we operate some of the world’s largest radio telescopes, we also make the equipment that enables our telescopes to collect extremely faint radio signals! In addition, our machine shop welders, machinists, and graphic designers, have created a collection of items made right here on site. Proceeds from sales benefit our education programs and the Green Bank Observatory Machine Shop.

shop.greenbankobservatory.org

CREATE YOUR OWN EVENT

Educational Field Trips!

Free tours, activities, and day and overnight field trips for organized groups of K - 16 students and youth clubs. Overnight students experience science first-hand by completing research projects with a real radio telescope. More than just a tour, a trip to the Observatory might just inspire your students to join the next generation of scientists and engineers. Registration required.

greenbankobservatory.org/education/field-trips/

Meetings and Workshops

Have a science event or workshop coming up? Why not host it at the Green Bank Observatory! Our site offers large auditorium and classroom spaces, catering, parking and accomodations. Contact us to learn more.

greenbankobservatory.org/visit/reservations/

We’ll come to you!

Request a college ambassador from our West Virginia Science Public Outreach Team (SPOT) to visit your school or group and deliver standards-based slideshows and hands-on activities.



Submit your presentation and activities request today!

greenbankobservatory.org/education/outreach



ORGANIZED GROUP TOURS

Motor Coach groups are welcome. Tours can be scheduled any day of the week. Please make advance reservations. A \$3 fee per person is required for motor coach tours. Group meals also available.

School and scout groups are welcome. See our event calendar for new Scout Weekend opportunities!

For additional group details and reservations, call (304) 456-2150 or email tours@gbobservatory.org

ABOUT THE OBSERVATORY

The Green Bank Observatory, founded in 1956, is the birthplace of modern radio astronomy; a branch of astronomy that studies the invisible radio waves produced by cosmic objects. The world’s first radio telescope is situated here. Project Ozma, the first modern search for extraterrestrial intelligence, took place here. Also it was at the Observatory’s 140-foot diameter telescope that the first complex organic chemicals were discovered in space.

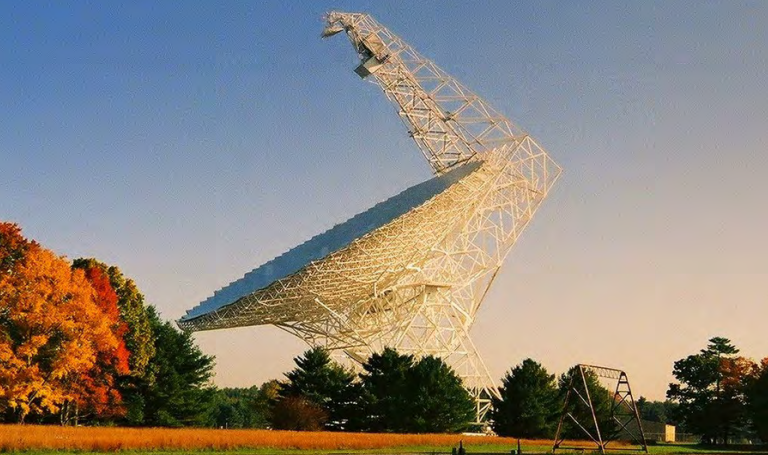
Today, radio astronomers can detect the remote whispers of the universe, in order to discover answers to our most astounding astronomical questions.

Exhibit Hall mural (top) created by Tour Guide Rebekah Anderson

greenbankobservatory.org
304-456-2150

Cover: Image of dark interstellar cloud with models for the molecular structure of propenal and propanal.
Illustration: P.Vosteen (GBO/AUI/NSF); Photo: T.Wheadon; T.A. Rector (UA Anchorage), H. Schweiker (WIYN & NOAO/AURA/NSF)

Plan Your Trip



Call 304-456-2150 or email
tours@gbobservatory.org
for advance reservations and information

PUBLIC SITE TOURS

Offered Year-Round

Adults (ages 11-64) – **\$6/person**

Seniors (65 & up) – **\$5/person**

Children 10 & under – **Free**

Active Service Personnel and Veterans – **Free**

Tour the fascinating world of radio astronomy from the pioneering instruments of the 1950s to the world's premier telescope, the GBT! This family-friendly tour is our most popular offering!

See our schedule on the back of this brochure or go to our website for tour information.

greenbankobservatory.org/visit

STAR LAB SUNDAYS

Every Sunday, **2 p.m. - 2:45 p.m. ; \$5/person**

Family Fun! Crawl into our planetarium balloon for a fascinating night sky tour! Space is limited to 20 participants. Program lasts 45 minutes and reservations recommended.

HIGH TECH TOURS

Select Thursdays (dates below) **3:30 p.m. - 4:30 p.m.;**
\$15/person; 15 participants max.; no photography of any kind is permitted. Reservations and screening required 48 hours in advance. Federal regulations require pre-screening for attendees age 18 and up.*

Look inside receivers and marvel at the precise engineering required to collect the Universe's faintest signals. An Observatory engineer will pull back the curtain on our site labs and control room as you see what makes our observatory one of the world's leading radio facilities.

High Tech Tour Dates:

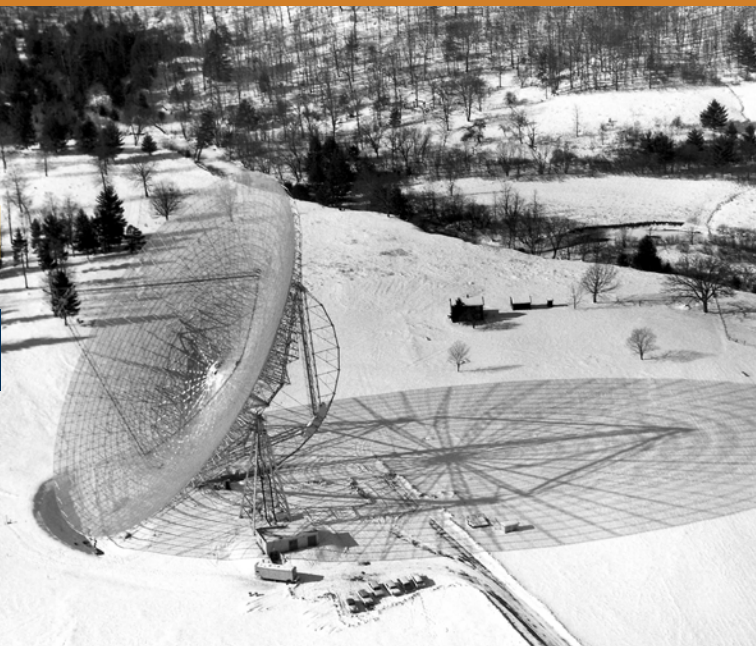
1/9; 2/13; 3/12; 4/9; 5/14; 6/11; 7/9; 8/13; 9/10; 10/8;
11/12; 12/10

*For more on our screening policy visit:
greenbankobservatory.org/visit/screening

HISTORY TOURS

Offered November through April. Available on request and by advanced reservation only. See historical control rooms and other areas of our site not open on our regular tour and learn the history behind the science! Minimum 5 people per tour.

Advance reservations are required. **\$20/person.**



SETI TOURS

Select Fridays (dates below); **1 p.m. - 3:30 p.m.;**
\$40/person

Due to high demand and limited capacity, advance reservations are strongly suggested. Limit of 20 participants max., 4 min.; Ages 12 & up. Hard hats and light refreshments provided. The tour requires climbing stairs.

Our tour celebrates Green Bank's historic Search for Extra Terrestrial Intelligence (SETI). It begins with an exclusive presentation right in the control room of our historic 85-I Telescope where the search began with Frank Drake's OZMA project. From there, guests enjoy rare admittance inside the 140-foot telescope where Jill Tartar's Project Phoenix took place and then to normally-restricted GBT access points. The tour ends in our Drake Lounge where you will be greeted by one of our own astronomers and learn about the future of SETI and the GBT role on the Breakthrough Listen project.

If you've ever wanted to be inside our operation control rooms or to speak to one of our radio astronomers in person, then this is THE opportunity of a lifetime!

Tour dates:

5/29; 6/5; 6/12; 6/26; 7/10; 7/17; 7/24; 7/31; 8/7; 8/14;
8/21; 8/28; 9/4; 9/11; 9/18; 9/25

FAMILY SCIENCE LABS

Select Saturdays (dates below); **1 p.m. - 3 p.m. ;**
Reservations Suggested

Get your family started in science!

Kids between ages 4 - 9 will love our fun-filled, hands-on science projects. We provide all materials.

This year, we'll focus on force and motion, ecosystems, weather and climate, and engineering.

Dates: 3/21; 5/23; 7/25; 11/7

SCOUTING TRIPS

Day trips can be scheduled any day of the week. Tour reservations are free for organized scout groups but advance arrangements are required. For overnight stays and badge completions, see the dates below.

Scouts BSA Astronomy Badge Weekend Dates:

1/17 - 19; 2/21 - 23*; 3/13 - 15; 4/10 - 12; 5/15 - 17;
9/25 - 27*; 10/16 - 18; 12/11 - 13

Girl Scout Badge Weekend Dates
(Junior/Senior Scouts):

2/14 - 16; 9/18 - 20; 11/13 - 15

Daisies & Brownies Day Trip Dates:

2/14; 2/16; 9/18; 9/19; 11/13; 11/15

*Scouts BSA Electronics Badge Weekend



STAR PARTIES

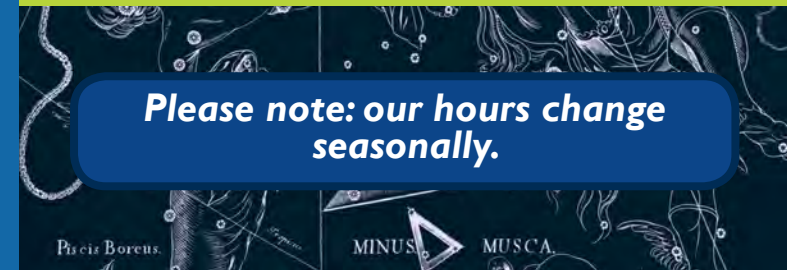
Meet at the Science Center - Begins at Sunset. **FREE!**

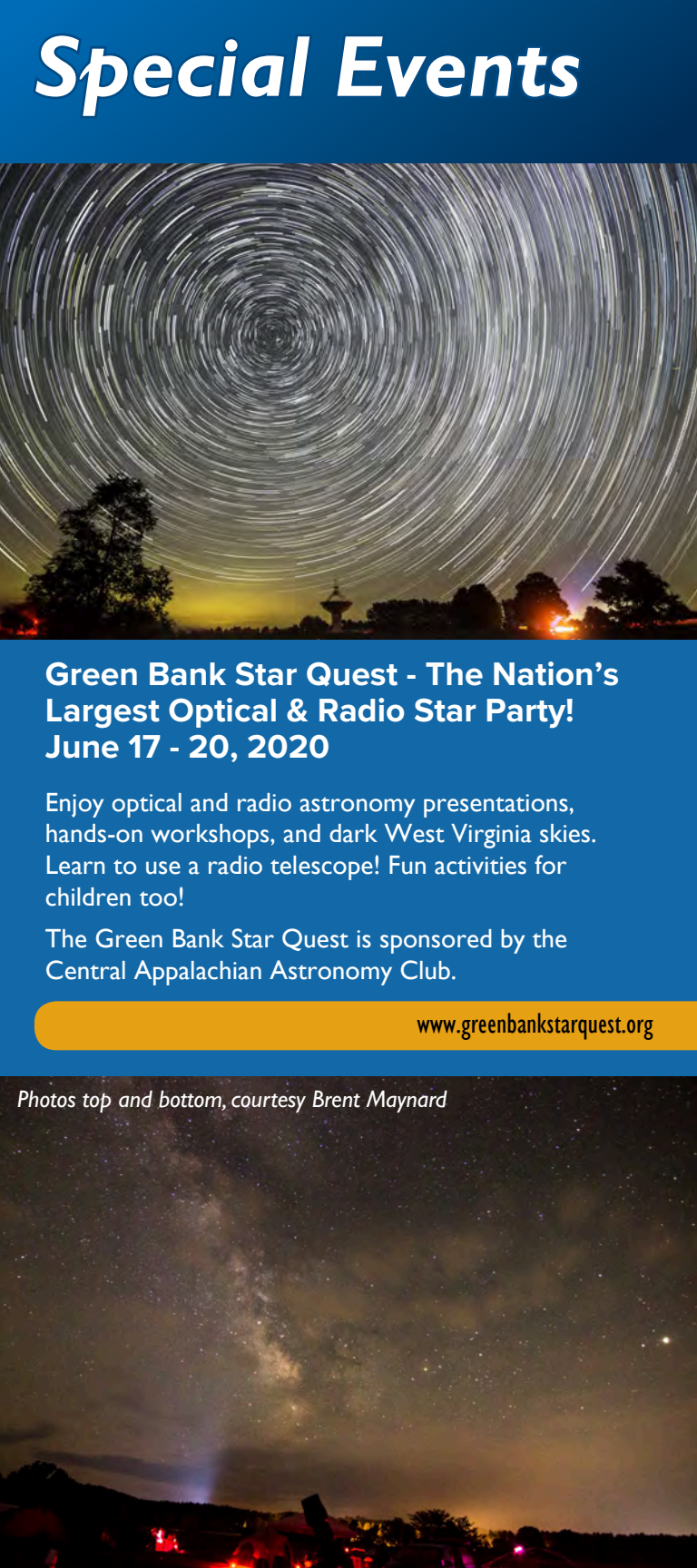
Green Bank Observatory staff will treat you to views of the night sky through optical telescopes. If it is raining, don't worry, we will have a stellar indoor presentation.

Star Party Dates:

1/18; 2/15; 3/21; 4/18; 5/16; 6/13; 7/18; 8/15; 9/19; 10/17;
11/14; 12/12

Please note: our hours change seasonally.





Special Events

Green Bank Star Quest - The Nation's Largest Optical & Radio Star Party! June 17 - 20, 2020

Enjoy optical and radio astronomy presentations, hands-on workshops, and dark West Virginia skies. Learn to use a radio telescope! Fun activities for children too!

The Green Bank Star Quest is sponsored by the Central Appalachian Astronomy Club.

www.greenbankstarquest.org



Space Race Rumpus Bike Among the Telescopes! June 12 - 14, 2020

Whether you are an experienced mountain biker or complete novice, there will be rides, races, and cycling for all ages and levels. Join us for a weekend-long cycling festival with a variety of fun rides. The Rumpus also features bonfires, on-site camping, and live music!

Early Registration Discounts!

spaceracerumpus.org



Green Bank Open House & Family Science Day October 4, 2020, 1 - 4 p.m.

Where else can you build and launch a rocket, test your engineering skills, do fun science experiments, and see some of the biggest telescopes in the whole world ALL IN ONE DAY? Public site tours will be available as well as rare peeks into the control room of the world's largest fully-steerable telescope!

Free Event! No reservations required. Rockets and tour tickets available while supplies last.



FEATURED EVENTS

All Featured and Upcoming Events - greenbankobservatory.org/events

Drake Lectureship, 2020

The Frank Drake Lectureship is awarded each year to a member of the sciences, arts, or humanities community in recognition of their contributions to advancing human knowledge and creativity.

Dr. Frank Drake, the Lectureship's namesake, has had a long and distinguished career that began at the Observatory in Green Bank. In 1960, using a radio telescope at Green Bank, Dr. Drake made the first modern search for radio signals from extraterrestrial civilizations, beginning an area of scientific research that continues to engage creative minds today.

Garth Newel Emerging Artist Fellow Showcase, August 6, 2020

Music comes to the Observatory from the Garth Newel Music Center in Warm Springs, VA, and the Emerging Artist Fellowship Program. This highly competitive four-week, intensive chamber music program is awarded to dedicated string players and pianists ages 18-28 who receive lessons and coachings from the Garth Newel Piano Quartet and other renowned faculty. We are honored to have such highly talented and skilled musicians play for us in the Science Center Auditorium. This is a free event for our community sponsored by the Green Bank Rec Association.

Turkey Trot, November 28, 2020

Burn off the Thanksgiving feast at the 13th annual Turkey Trot hosted by the Green Bank Observatory. Race in a traditional 5K run/walk, a 10K trail run, or the 1K Gobble Wobble for kids 8 and under. While you race, you have a great view of our telescopes including the GBT!

Races begin at 1:00 (10K) and 1:10 p.m. (5K Run/Walk). All races start and finish at the Science Center.

greenbankobservatory.org/green-bank-turkey-trot/

Proceeds of the Turkey Trot support the Pocahontas County High School track team and the William Dilley Scholarship.



Visit the Green Bank Telescope

Green Bank Observatory

Hours of Operation

November 1 – May 23

Open Thur - Mon, 10 a.m. - 6 p.m.

Closed Tue - Wed

Tours at 11 a.m., 1 p.m. and 3 p.m.

May 24 – Sept 5

Open Daily; 8:30 a.m. - 7 p.m.

Tours Hourly 9 a.m. - 6 p.m.

September 6 - October 31

Open Thur - Mon, 8:30 a.m. - 7 p.m.

Closed Tue - Wed

Tours Hourly 9 a.m. - 6 p.m.

Closed Dates:

4/12 for Easter Holiday

11/24-11/27 for Thanksgiving Holiday

12/22-12/25 for Christmas Holiday

12/29-1/1 for New Year's Holiday

Starlight Café Hours:

October 1 - May 23, 11 a.m. - 6 p.m.

May 24 - September 30, 11 a.m. - 7 p.m.

Admission to the Science Center and Exhibit Hall are FREE!

Public Tour Rates

Adults (Ages 11-64) \$6.00

Seniors (65 & Up) \$5.00

Children (10 & Under) Free

Veterans & Active Service Members Free

HOURS SUBJECT TO CHANGE.

In inclement weather, please check our social media for updates

    @GreenBankObservatory

Getting Here is Easy!

Only 40 minutes to Snowshoe; 15 minutes to Cass!



Welcome to the Quiet Zone!

The Green Bank Observatory Science Center is at the heart of the National Radio Quiet Zone, a 13,000 square mile region of minimized radio signal interference designated by the U.S. Government in 1958 to create a safe haven for radio astronomy.

Please put your phone in airplane mode when you arrive and plan to turn it off completely, along with all other electronic devices while touring the Observatory and grounds.

You can bring a film camera or purchase a disposable camera in our Gift Shop to capture your experiences at the Green Bank Observatory.

greenbankobservatory.org/about/national-radio-quiet-zone



The GREEN BANK OBSERVATORY is supported by the National Science Foundation and is operated by Associated Universities, Inc. Any opinions, findings and conclusions or recommendations expressed in this material do not necessarily reflect the views of the National Science Foundation.

Green Bank Observatory
155 Observatory Road, Green Bank, WV 24944