

Welcome to Green Bank!



Image credit: R. Rosen

Who are we?

The Green Bank site is part of the National Radio Astronomy Observatory

- Funded through the National Science Foundation
- Mission is to enable forefront research into the Universe at radio wavelengths.
- NRAO telescopes are open to all astronomers
- NRAO also provides both formal and informal programs in education and public outreach for teachers, students, the general public, and the media.



NRAO has complementary suite of telescopes and facilities

Green Bank
Observatory



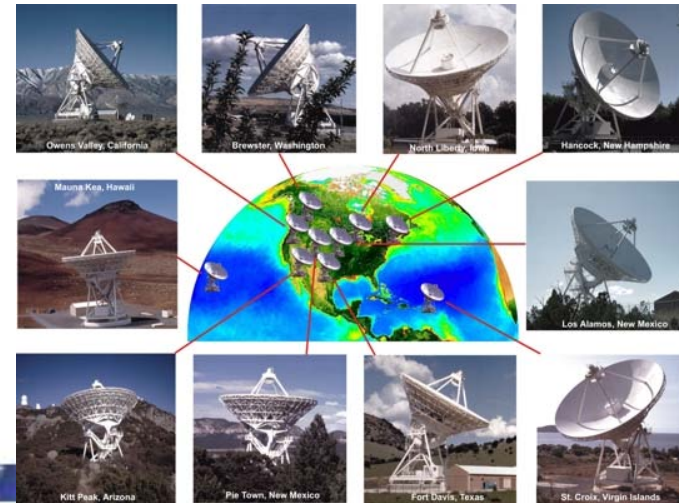
ALMA
(Chile)



New Technology Center
(Charlottesville, Virginia)



Very Large Array
(Socorro, New Mexico)



Very Large Baseline Array

Green Bank is original NRAO site, with world class telescopes for >50 years

Started 1958
Completed 1959



Completed 1965



Completed 1995



Completed 2000



Completed 1994

Completed 1962



Completed 1962

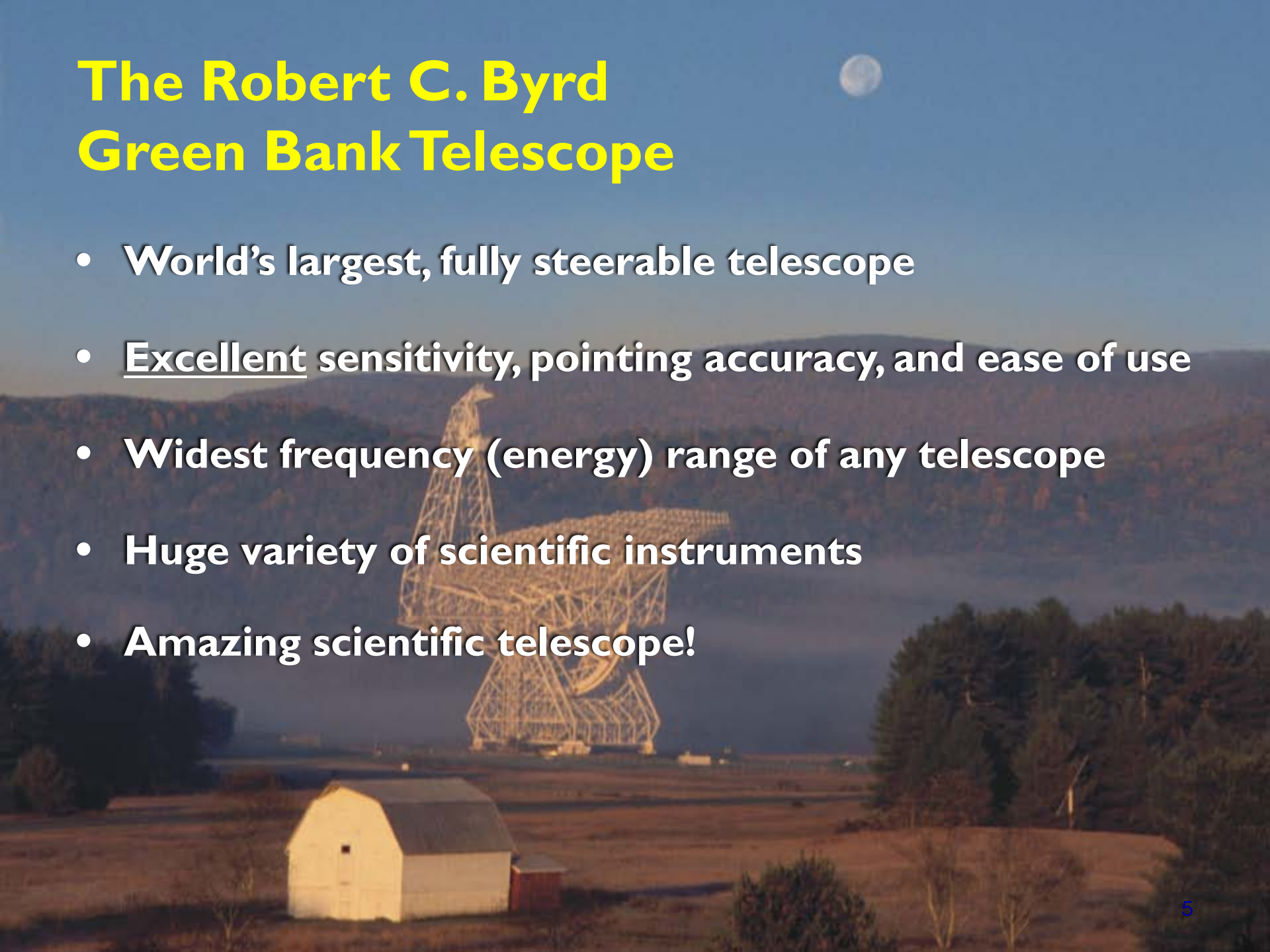


Completed 1967



The Robert C. Byrd Green Bank Telescope

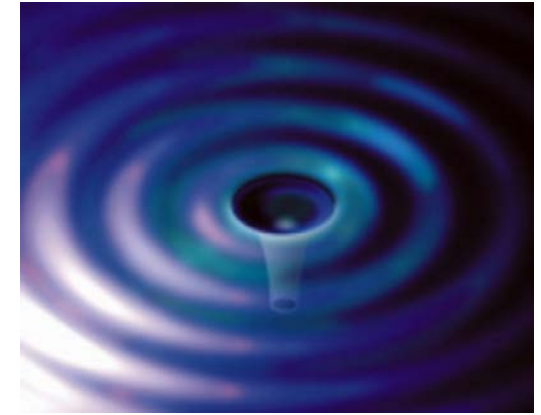
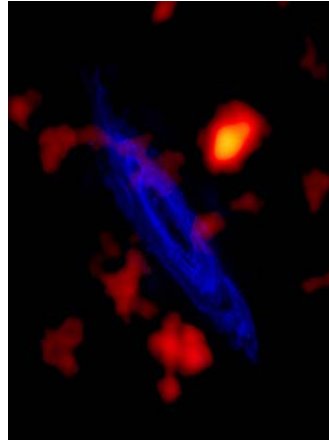
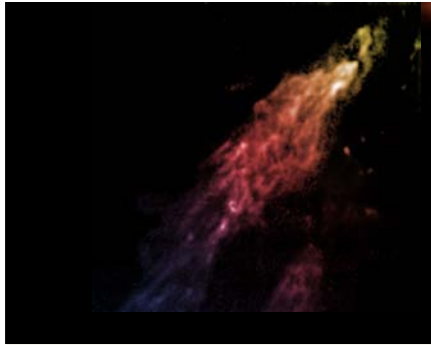
- **World's largest, fully steerable telescope**
- **Excellent sensitivity, pointing accuracy, and ease of use**
- **Widest frequency (energy) range of any telescope**
- **Huge variety of scientific instruments**
- **Amazing scientific telescope!**



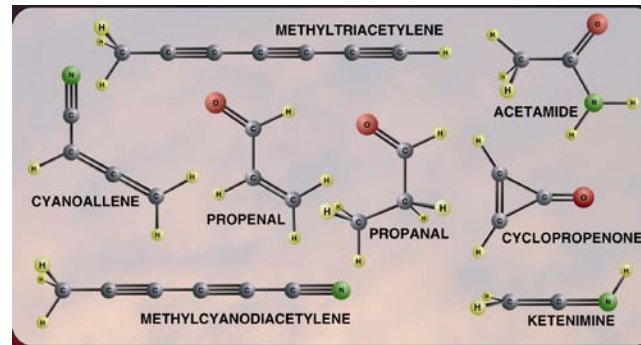
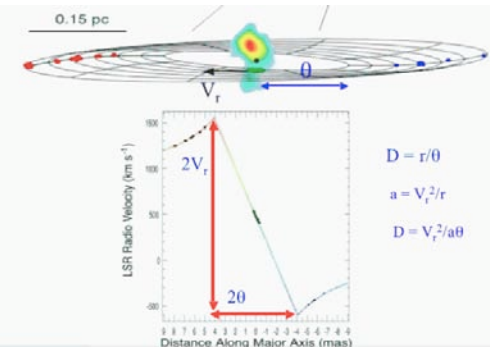
A World Class Facility for Astronomy Research

Understanding galaxies

The formation and evolution of stellar systems



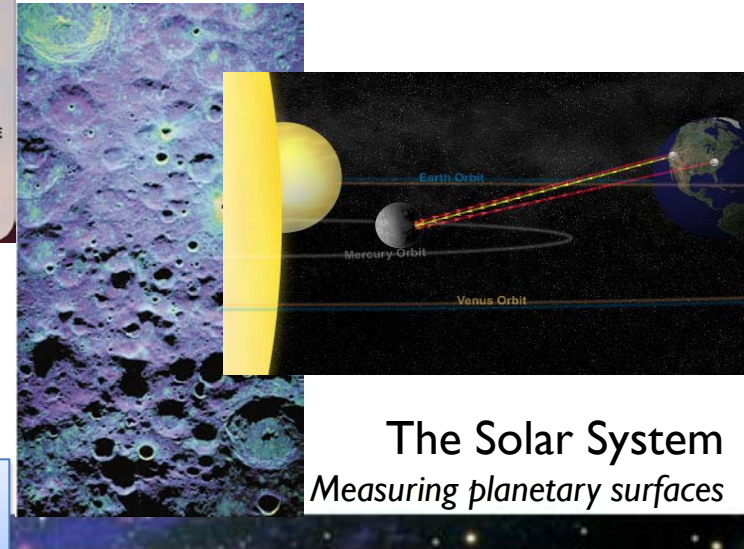
Fundamental Physics,
Testing theories of gravity



Astrochemistry
The origin of Life

Cosmology,

The origin and destiny of the Universe



The Solar System
Measuring planetary surfaces



Open Skies Policy:
GBT can be used by any qualified researcher in the world

A telescope designed to be enhanced

Ongoing development program to ensure the GBT remains a vibrant, cutting-edge instrument for years to come



All development is done in conjunction with college & university groups around the country

NRAO's Center for Science Education

bridging the communities of scientists and educators, creating connections in science, technology, engineering and mathematics

- Research Workshops and opportunities
- Research Experience for K-12 teachers
- Student training workshops
- Pulsar Search Collaboratory
- Co-op and REU Programs
- Developer and supplier of science education materials (e.g. Quiet Skies)
- WV Governor's School
- StarQuest
- Society for Amateur Radio Astronomers
- school field trips, amateur astronomy clubs, ...
- **More than 50,000 visitors last year**



