

Giant Metrewave Radiowave Telescope

The Giant Metrewave Radio Telescope (GMRT) Observatory, located near Pune, Junnar, Narayangaon in India, is an array of thirty fully steerable parabolic radio telescopes observing at metre wavelengths.

Details from this article will be useful in science and technology segment of the Civil Services Examination.

Overview of the GMRT

The Giant Metrewave Radio Telescope is operated by the National Centre for Radio Astrophysics (NCRA), which in turn is a part of the Tata Institute of Fundamental Research, Mumbai. It was conceived and built under the supervision of Prof. Govind Swarup from 1984 to 1996.

The observatory of the Giant Metrewave Radio Telescope is located about north of Pune at Khodad, while its office is located in the Savitribai Phule Pune University.

Astronomers from all over the world regularly use this telescope to observe many different astronomical objects such as HII regions, galaxies, pulsars, supernovae, and Sun and solar winds.

Lates developments regarding the GMRT

- In August 2018, the most distant galaxy ever known, located at a distance of 12 billion light-years, was discovered by GMRT
- In February 2020, it helped in the observation of the biggest explosion in the history of the universe, the Ophiuchus Supercluster explosion.
- On November 27, 2020, the GMRT received the IEEE Milestone, an award which honours significant technical achievements and excellence in unique products, services

The Institute of Electrical and Electronics Engineers (IEEE) is the world's largest technical professional organization dedicated to advancing technology in all areas related to electrical and electronics engineering.

The previous two Indian IEEE Milestones were for the pioneering work done by Sir J.C. Bose (who passed away on November 23, 1937) that demonstrated the generation and reception of

radio waves in 1895. His work got due recognition in 2012. The second was for the 'scattering of light' phenomenon observed by Sir C.V. Raman in 1928.

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