

InRaSS Colloquium Series

2nd Talk (25th July, 2023 18:00 – 19:00 IST)



Webinar on:

Probing the Universe using radio waves with the GMRT

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The demonstration of how to transmit and receive radio waves, first done by Sir J.C. Bose in 1894, led to the opening up of a new window to the Universe. India has a strong tradition in this branch of astronomy, starting with Prof Govind Swarup who kicked off activities in this area at TIFR in 1963.

In this talk, we will trace the fascinating story of radio astronomy and the engineering behind it, with special emphasis on its growth and current status in India, ending with the frontline Indian facility -- the Giant Metrewave Radio Telescope (GMRT). The GMRT, a world class low frequency radio observatory has been operational since 2002. We have recently completed a major upgrade of the GMRT employing some cutting edge new technologies. This will keep the GMRT at the forefront as one of the most sensitive facilities in the world in the 100 to 1500 MHz range for the next decade or so.

This talk will spotlight some of these multi-disciplinary technological aspects of the GMRT, and also take a look into how it has improved our understanding of the Universe, and what the future holds. In particular, we will look closely at how the GMRT is used to carry out interesting and precise observations of pulsars -- rapidly spinning neutron stars.

Organised by: Indian Radio Science Society
(InRaSS)



Webinar Link: <https://www.youtube.com/watch?v=Qx28uO4pBiM>