



Module PMRF-ISSS015/2022

## Antennas in Radio-astronomy

Name of the PMRF student

**Subhadip Saha**

Required background of the students taught

*Students from the departments of Physics, Astronomy and Engineering are invited to attend. Basic knowledge and understanding of EM theory is required.*

Online session coordinator

Will be chosen from the list of registrants

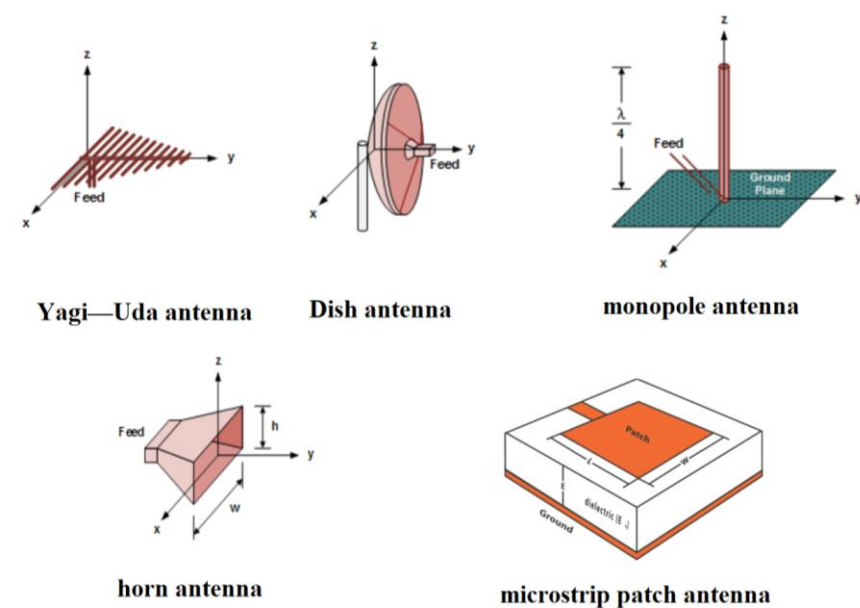
Details of the content of the module

This would be a basic level course, specifically intended for students from non-Electrical departments. Students from Electrical department are also **warmly welcomed**.

The following topics are aimed to be covered,

- Radiation and Antenna fundamentals.
- Various Figures of Merit.
- Various types of antennas and their specific applicability and demonstration.
- Antenna arrays, Phased arrays, Beamforming, Beam scanning.
- Antenna simulation in 4NEC2, HFSS, CST (optional).
- Interferometer (Optional).

The objective of the course is to train students specifically from non-technical background to design and fabricate antennas so that they could participate in different multi-disciplinary projects in Radioastronomy (eg. SWAN, SKA, LOFAR, MWA etc.).



Schedule of the module

Start date : 07-09-2022

End Date : 30-11-2022

Total no. of classes : 12-15

Schedule : Wednesday (17:00 to 19:00)

Saturday (15:00 to 17:00)

Meeting link : Will be shared later

Contact email ID: [issf.forum@gmail.com](mailto:issf.forum@gmail.com)

Registration link: <https://forms.gle/zGSBoHbvADcH7vAn8>