



Survey, Characterizing and Mitigating Radio Frequency Interference in Low Frequency Radio Astronomy

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Radio Frequency Interference (RFI) poses a significant challenge to low-frequency radio astronomy, hindering the detection of faint cosmic signals. This study investigates the Survey of RFI sources and characteristics in the 10-500 MHz range, using data from the Gauribidanur observatory. We develop and build an RFI database from the existing dataset. A 24-hour RFI monitoring system will help study and apply advanced RFI identification and tagging and improve the sensitivity and fidelity of low-frequency radio astronomy observations. This work contributes to developing effective RFI mitigation strategies, enabling the pursuit of cutting-edge astrophysical research in this frequency regime.