

Deep low frequency image of Coma cluster of galaxies

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Extended abstract

We would present our efforts to map radio emission using the upgraded Giant Metrewave Radio Telescope in order to achieve high sensitivity, high resolution, high dynamic range mapping of the Coma cluster of galaxies. We will present low radio frequency, 400 MHz imaging with band-3 of upgraded GMRT, of the Coma cluster, an important `laboratory' to study the role of cluster environment on the properties of the radio sources in the cluster. The image has an angular resolution of 5 arcsec and an rms of 28 microJy . We detected more than 100 extended sources within a circular region of diameter 2.9 deg and identify numerous active galactic nuclei, including new detections for the first time for three sources. Early results from this effort would be presented.