



Continuum surveys science in the Square Kilometre Array era

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Radio continuum from celestial sources is of fundamental importance to understand the Universe. Ultra-deep observations of parts of the sky and wide surveys covering the full sky are expected to reach unprecedented resolutions and depths with the advent of the Square Kilometre Array (SKA). Continuum surveys with the precursors and pathfinders of the SKA are set to demonstrate the science possible. Statistics of the radio sources towards galaxy clusters, radio galaxies are rapidly evolving as new surveys are being carried out. I will provide an overview of recent results from ongoing surveys of radio galaxies, galaxy clusters and superclusters with the uGMRT, LOFAR and MeerKAT. I will touch upon the synergy of continuum surveys science with the magnetism science working group for the science goals. I will also briefly mention the efforts towards building a data processing pipeline for the SKA and participation of India in that aspect. In conclusion, engagement in development of tools to deal with the big data and testing the scientific possibilities on the precursors and pathfinders will allow us to realise the science goals with the SKA.