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Multi-frequency estimation of the cosmic radio dipole from continuum radio surveys

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Continuum surveys of the radio sky provide a rich resource of information. Besides the analysis of individual galaxies and other astrophysical sources, they also allow us to probe cosmological models. We analyse the data provided by several surveys across radio frequencies to estimate the Cosmic Radio Dipole in the radio source counts. This dipole is a deviation from the statistically isotropic Universe caused by the proper motion of the Solar system and the large scale structure. The kinetic effect is also hold responsible for the temperature dipole of the Cosmic Microwave Background.
In this talk I will describe the quality cuts required to make radio continuum catalogues suitable for cosmological analysis. In particular I will show results from the analysis of NVSS, SUMSS, WENSS, TGSS ADR1 and GLEAM, which together cover a decade in frequency and the full sky.

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