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A fresh view on cosmic rays and magnetic fields in halos of spiral galaxies

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First results from a new radiocontinuum study of edge-on galaxies are presented. The study is based on data from the CHANG-ES (Continuum HAlos in Nearby Galaxies - an EVLA Survey; PI J. Irwin) project which has observed 35 edge-on galaxies with the Karl G. Jansky Very Large Array (JVLA) in two frequency bands (L- and C-band) and in three array configurations (D, C, B). This survey benefits significantly from the new multi-channel capability of the upgraded facility.

The results presented here are based on the D-array data only. From the total power maps a "mean" radiocontinuum halo has been derived and the polarization information provides information on the magnetic field structure in the halos.

Collaboration

- not specified -

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763

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