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STUDY OF NON-THERMAL EMISSION FROM THE GALACTIC CENTER

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We present a map of the Galactic Center region obtained with the Itapetinga radio telescope in the 22 GHz continuum with 4.1 arc min resolution. We compared these data to a 5 GHz map obtained with similar angular resolution (Whiteoak and Gardner, 1973, Astrophys. Lett. 13, 205), and a magnitude equivalent to the spectral index was derived. These relative spectral indices were obtained for the area mapped, and reveal the existence of sources exhibiting pronounced flux reduction at 22 GHz compared to the 5 GHz fluxes, which we suggest to be associated with non-thermal sources.

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