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The interstellar medium of the edge-on galaxy NGC 5907: new observations in the cm- and mm-range

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The nearby edge-on galaxy NGC 5907 is subject to ongoing investigation since several years. It is a non-interacting and relatively inactive galaxy, classified as Sc. Here we present new observations of this interesting galaxy at several wavelengths in the radio range:

- Radio continuum emission (including polarization) at $\lambda\lambda 2.8$ and 20 cm, observed with the Effelsberg 100 m telescope and the Very Large Array, respectively.
- Continuum emission at a wavelength of $\lambda 1.2$ mm, observed with the MPIFR 19-channel bolometer installed in the secondary focus of the 30 m telescope on Pico Veleta.
- Line emission from the $^{12}\text{CO}(1-0)$ and $(2-1)$ lines, observed also with the 30 m telescope.

First results of these observations are shown. Additionally we discuss the properties of this galaxy in comparison to other edge-on spirals.

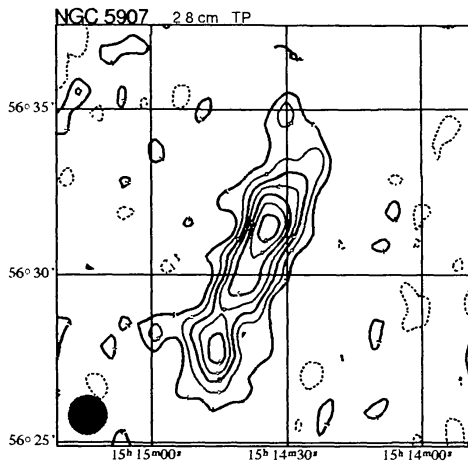


Fig. 1: Radio continuum map of NGC 5907 at $\lambda 2.8$ cm

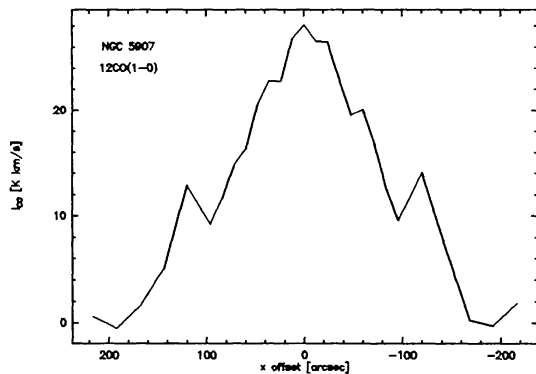


Fig. 2: Radial distribution of the $^{12}\text{CO}(1-0)$ line emission of NGC 5907