

The Dynamic of Molecular Gas of NGC 7538 IRS 1 in 345 GHz Using SMA

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The NGC7538 IRS1 is a hyper-compact HII region located in Perseus at 2.65kpc. The luminosity of IRS1 is around $10^6 L_{\odot}$, suggesting it embeds the O6 star. Previous the outflow, magnetic structure, and abundant molecular line have been studied. The P-Cygni and inverse P-Cygni profiles have shown in different lines, associated with distinct dynamics structures. We present 345GHz. SMA observation with high spatial and frequency resolution. The seven sources have been detected as larger than $0.1''$. One of the brightest source is called MM1, identifying the strength of molecular lines like SiO .

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