FOURIER TRANSFORM MICROWAVE SPECTROSCOPY OF THE N_2 CO_2 VAN DER WAALS COMPLEX

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The microwave spectrum of the weakly-bound complex of nitrogen and carbon dioxide was measured by Fourier transform microwave spectroscopy. A previous determination of the structure of this molecule was performed in a rotationally-resolved infrared study in the region of ν_3 of CO_2[a]. We have observed only *a*-type transitions, and have measured the hyperfine splitting due to the two ^{14}N nuclei. Consistent with the geometry proposed by Walsh et. al., the structure of the complex is T-shaped, with the CO_2 forming the cross of the T.

[a] M. A. Walsh, T. R. Dyke, and B. J. Howard, *J. Mol. Struct.* **189**, 111, (1988)