

## ROTATIONAL SPECTRA AND *AB INITIO* CALCULATIONS OF THE Ne-H<sub>2</sub>CO VAN DER WAALS COMPLEX

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Rotational spectra of the Ne-H<sub>2</sub>CO van der Waals complex were measured between 4 and 26 GHz using a pulsed jet cavity Fourier transform microwave spectrometer. The isotopomers studied include those of H<sub>2</sub>CO and D<sub>2</sub>CO with two isotopes of Ne. Deuterium nuclear quadrupole hyperfine structure was resolvable for some transitions and analyzed. Rotational and centrifugal distortion constants were determined and used to calculate structural parameters. Structural parameters from *ab initio* calculations on the MP2 level will be compared with experimental results.