

Abstract Submitted
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A Look at a Series of Alkyl and Perfluoroalkyl Bromides BRITTANY LONG, GARRY GRUBBS, STEPHEN COOKE¹, University of North Texas, RADIO SPECTROSCOPY GROUP TEAM — The pure rotational spectrum of bromoperfluoroethane between 9.0-13.0 GHz has been measured on a chirped pulse Fourier transform microwave spectrometer. A total of 839 transitions were observed for the six isotopologues. Only the *trans* conformer was observed for which the rotational constants are reported. Nuclear electric quadrupole coupling constants have been determined and reported. Also, two dipole forbidden/quadrupole allowed $\Delta J = 2$ transitions were observed in the spectra.

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