

## THE MICROWAVE SPECTRUM OF THE FLUOROBENZENE-NEON DIMER

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The microwave spectra of three isotopomers of fluorobenzene-neon (normal,  $^{22}\text{Ne}$  and  $d-5$ ) have been observed using a Fourier transform spectrometer. Twenty-two transitions were fit to eight constants. The dimer has a stacked structure with the neon over the fluorobenzene ring in the symmetry plane. The center of mass distance ( $R_{cm}$ ) is 3.44(1) Å, with the neon sitting between the center of mass and the center of the ring. The rotational constants have been determined as  $A = 1926.421(2)$  MHz,  $B = 1645.236(3)$  MHz, and  $C = 1279.734(1)$  MHz. The electric dipole moment was measured to be  $|\mu_a| = 1.15(3)$  D,  $|\mu_b| = 1.12(3)$  D,  $|\mu_t| = 1.61(5)$  D.