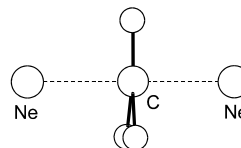


124  
IR $\text{CH}_3\text{Ne}_2^+$ **Methylium – neon (1/2)**  
(weakly bound complex)**D<sub>3h</sub>** assumed  
(effective symmetry class)  
(large-amplitude motion)  
 $\text{CH}_3^+ \cdot 2\text{Ne}$ 

$\nu$	$r(\text{C}\dots\text{Ne}) [\text{\AA}]^{\text{a})}$
0	2.344(2)
1	2.350(2)



The structure of the  $\pi$ -bound complex was determined from the rotationally resolved IR photodissociation spectrum of the degenerate asymmetric C–H stretch vibration  $\nu_3$ . The C...Ne separation is insensitive to small changes in the methylium structure upon complexation.

<sup>a)</sup> Uncertainties were unidentified.

Dopfer, O., Olkhov, R.V., Maier, J.P.: J. Chem. Phys. **112** (2000) 2176.