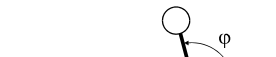


109	CH_3Ar_2^+	Methylium – argon (1/2)	C_{3v}												
IR		(weakly bound complex)	(effective symmetry class) (large-amplitude motion) $\text{CH}_3^+ \cdot 2\text{Ar}$												
	<table><tr><td>r_0</td><td>\AA^{a}</td></tr><tr><td>Ar...Ar</td><td>4.84(2)</td></tr><tr><td>C...Ar(1)</td><td>2.02^d</td></tr><tr><td>C...Ar(2)</td><td>2.80(8)</td></tr></table>	r_0	\AA^{a}	Ar...Ar	4.84(2)	C...Ar(1)	2.02 ^d	C...Ar(2)	2.80(8)	<table><tr><td>θ_0</td><td>deg</td></tr><tr><td>φ^{b}</td><td>99^c</td></tr></table>	θ_0	deg	φ^{b}	99 ^c	
r_0	\AA^{a}														
Ar...Ar	4.84(2)														
C...Ar(1)	2.02 ^d														
C...Ar(2)	2.80(8)														
θ_0	deg														
φ^{b}	99 ^c														

The structure of the π -bound complex was determined from the rotationally resolved IR photodissociation spectrum of the degenerate asymmetric C–H stretch vibration ν_3 .

^a) Uncertainties were not identified.

^b) See figure for the definition.

^c) Assumed at the value from MP2 calculations.

^d) Assumed.

Olkhov, R.V., Nizkorodov, S.A., Dopfer, O.: J. Chem. Phys. **108** (1998) 10046.