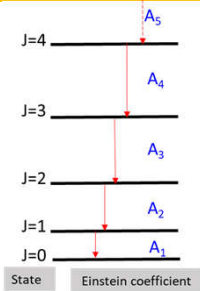


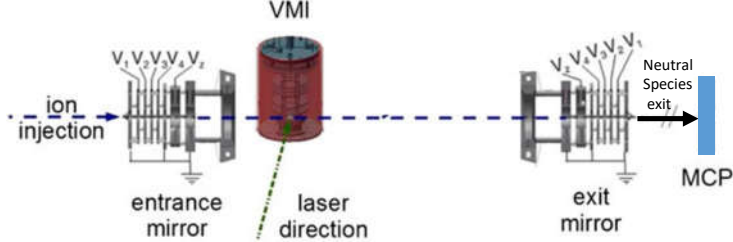
P5804: Rotational Cooling Dynamics of Hot Trapped OH⁻ Ions Probed by VMI Photoelectron Spectroscopy

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Radiative cooling rate
Einstein Coefficients

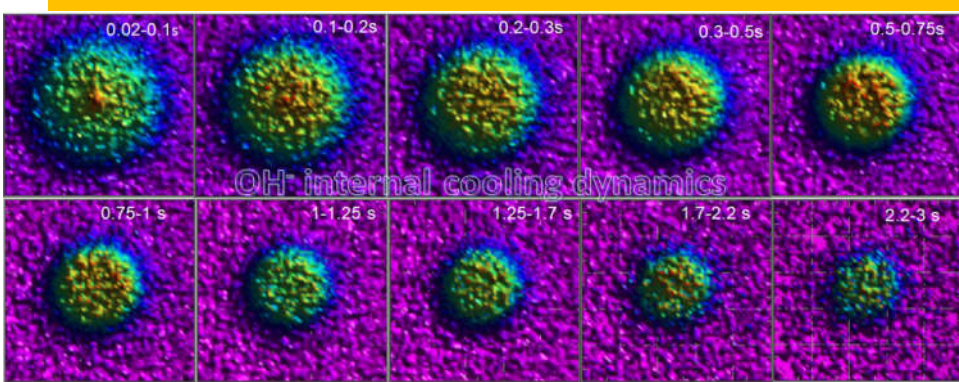


Probed by VMI photoelectron Spectroscopy
 $\text{OH}^- (^1\Sigma_2) + h\nu \rightarrow \text{OH} (^2\Pi_{3/2} \text{ \& } ^2\Pi_{1/2}) + e^-$

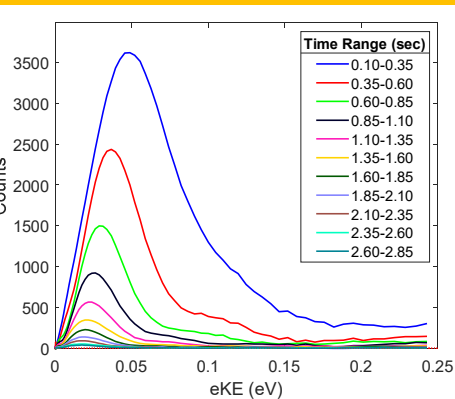


Experiment using Electrostatic Ion beam Trap + VMI

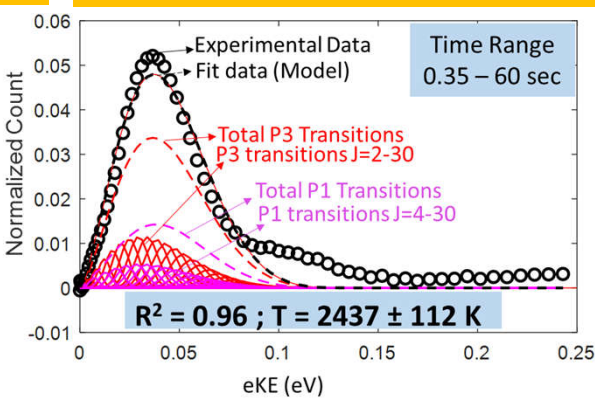
VMI image wrt time: OH internal cooling Dynamics



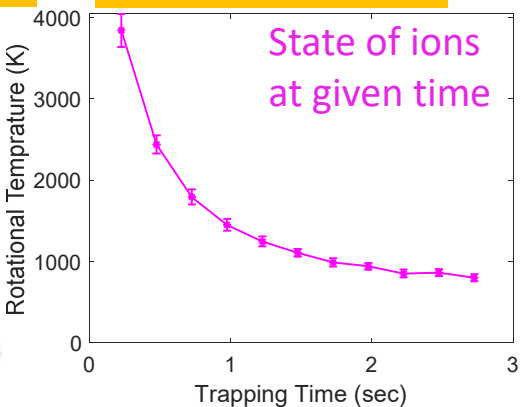
Radial Plot for different time range (Abel Transformed)



Fitting for Temperature using rotational transition intensity



Cooling rate of hot ions



Rotational levels population wrt time

