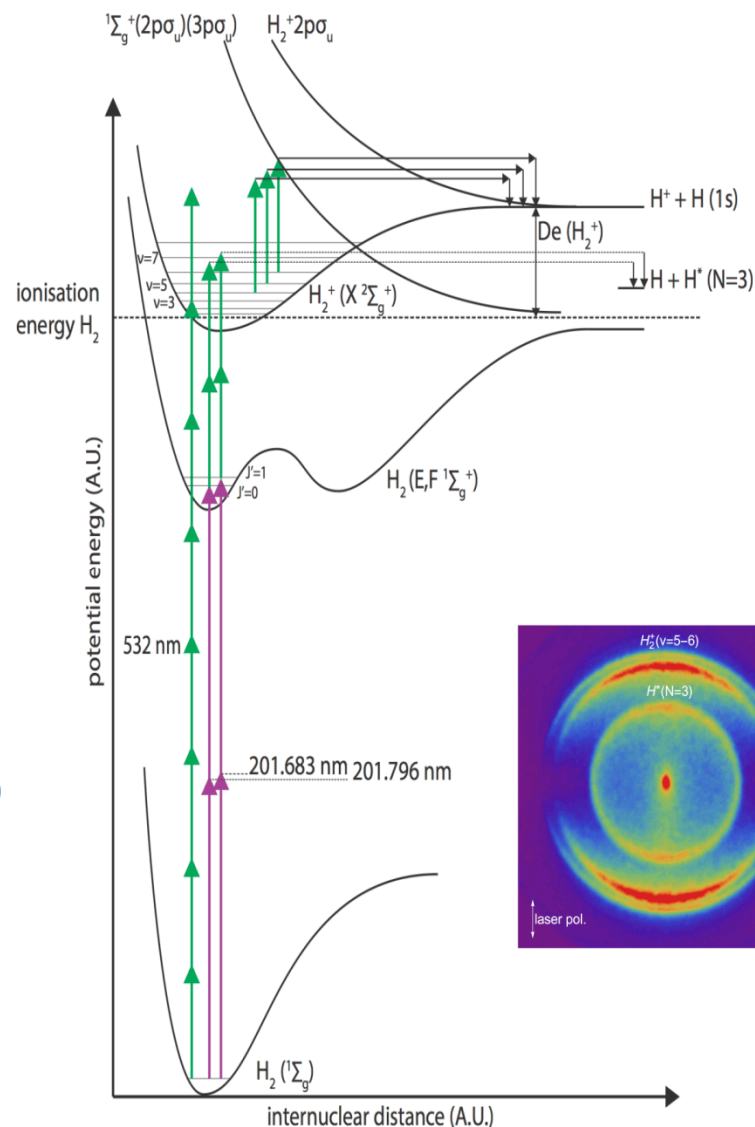
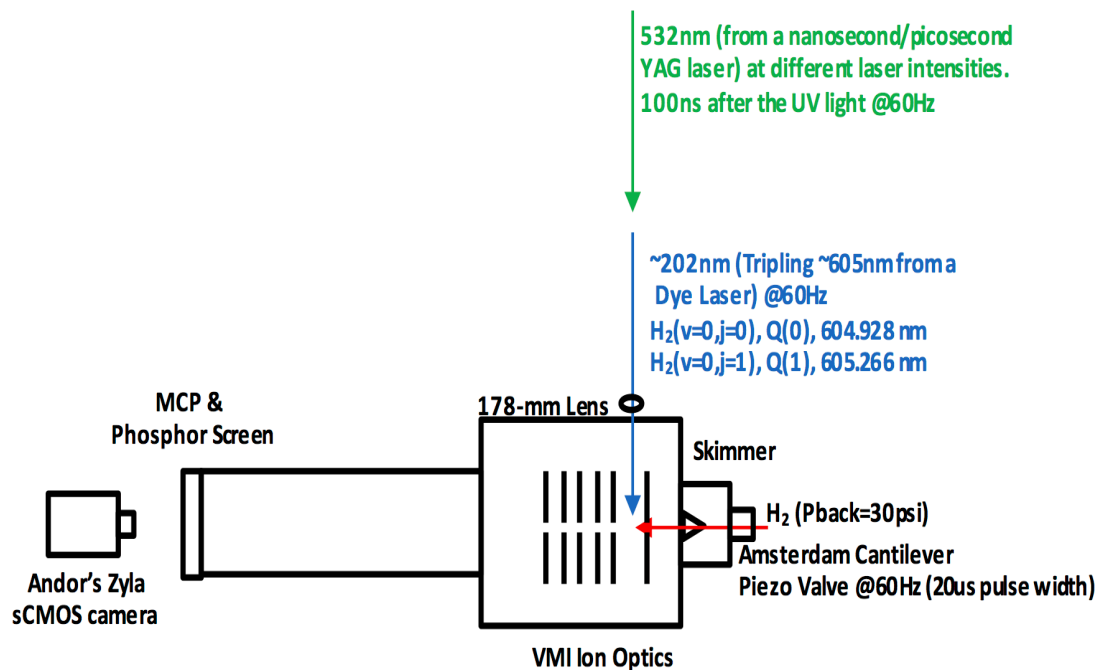




Alignment and Dissociation of the H₂ Molecule in Intense Laser Fields Using Velocity Mapped Ion Imaging

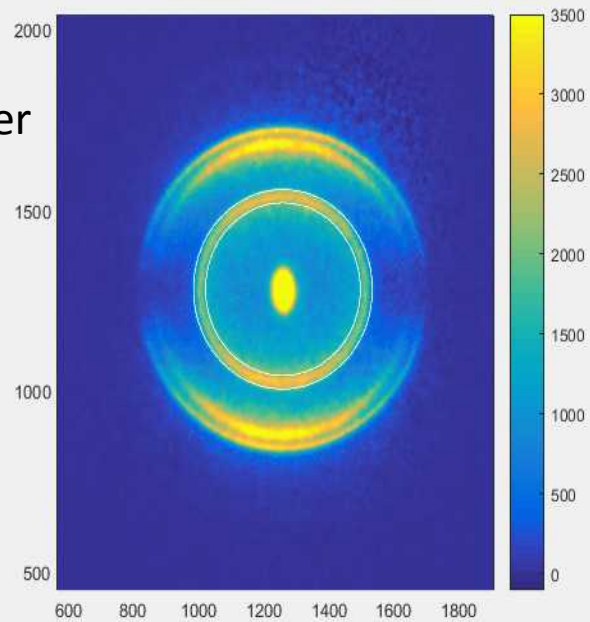
schematic diagram of the VMI apparatus for photoelectron and photofragment imaging (top view)



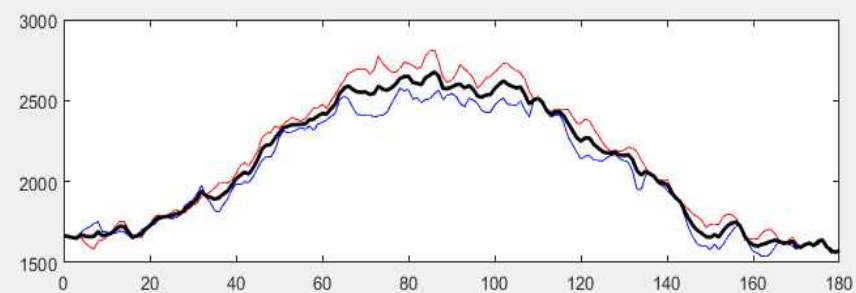
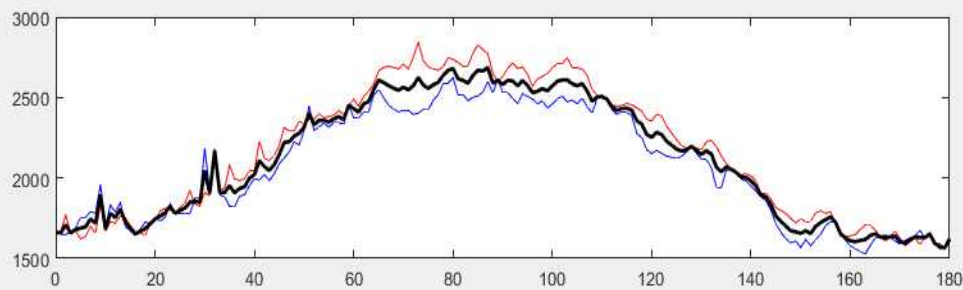
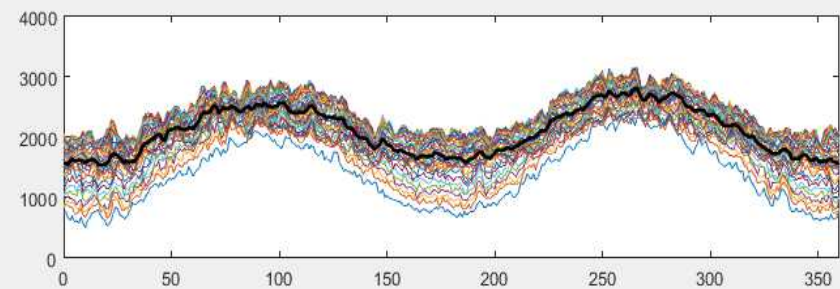
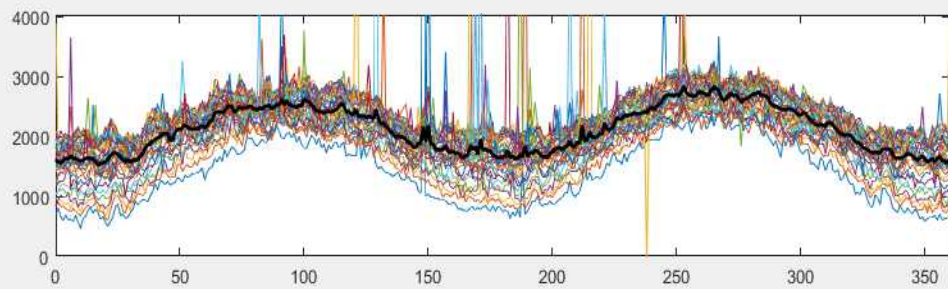
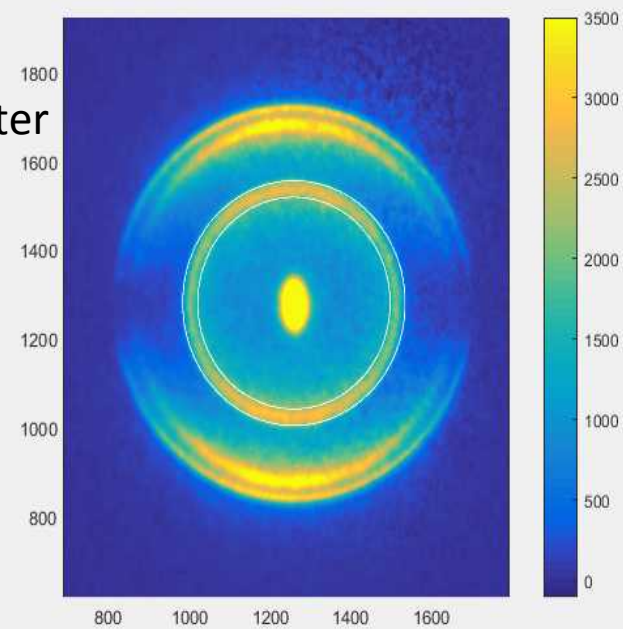
J=1 Center [x:1259,y:1280], 275, 37

Data analysis using MATLAB

w/o filter

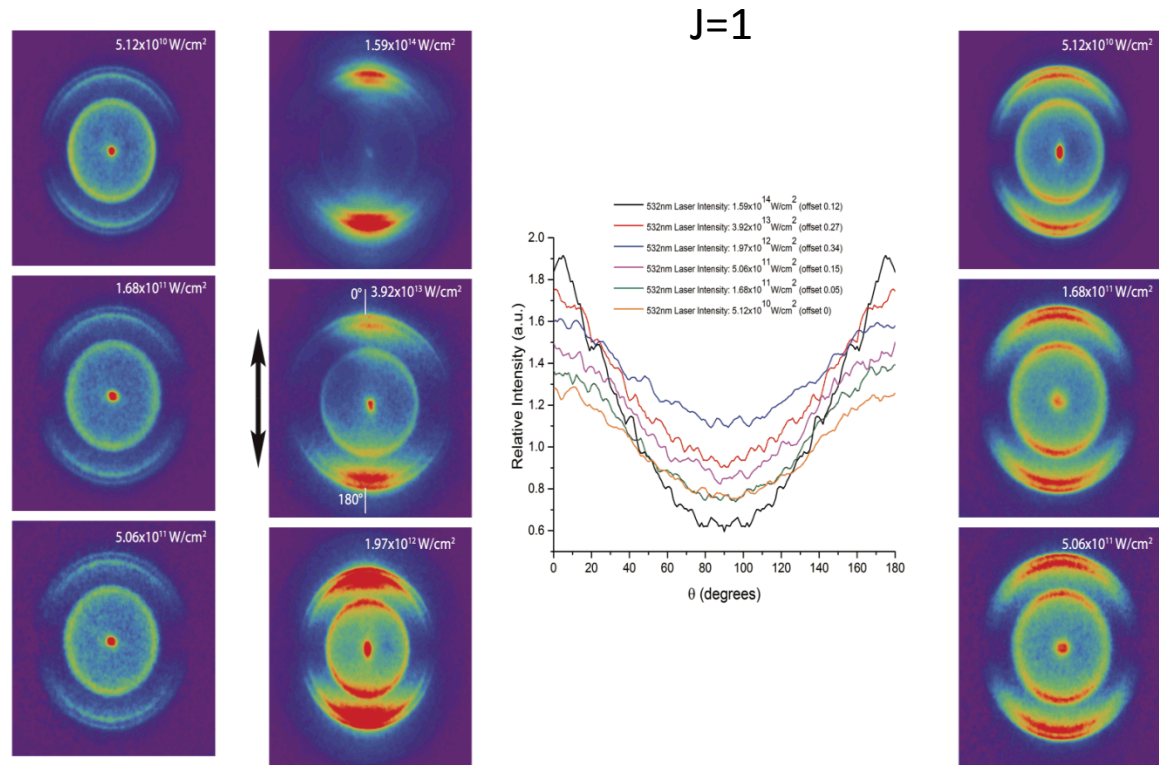
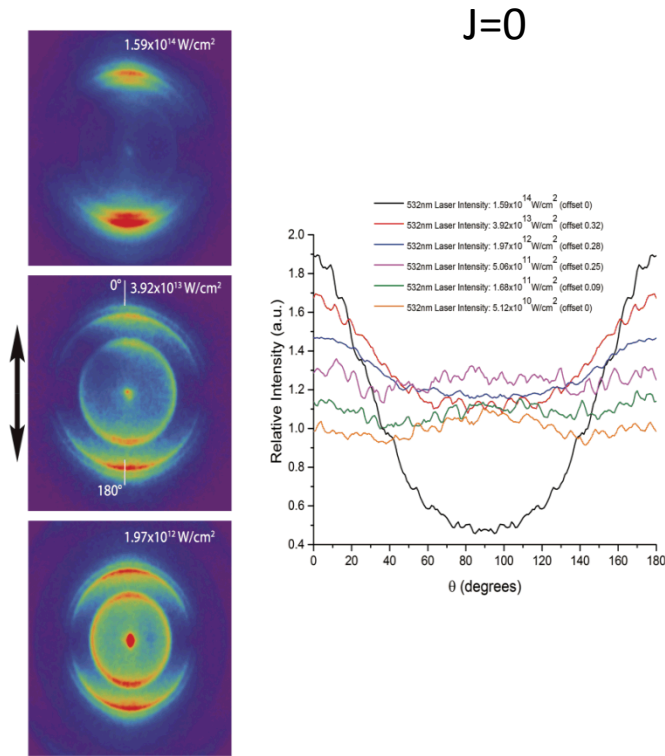


w filter



H_2 (E,F; $v = 0$, $J = 0$) state: At low laser intensity, the angular distribution of the H^+ shows a significant contribution from a $\sin^2 \theta$ component, while at higher laser intensities a predominantly $\cos^2 \theta$ distribution is observed.

In the case of the $J = 1$ state, no change in the distribution shape is observed





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