

Abstract Submitted  
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**Imaging molecular dynamics of dissociative electron attachment to polyatomic molecules: ammonia, methane, and methanol**<sup>1</sup> HIDEHITO ADANIYA, DANIEL SLAUGHTER, THORSTEN WEBER, ALI BELKACEM, Lawrence Berkeley Lab, EXPERIMENTAL AMO GROUP TEAM — Momentum imaging experiment is performed to study molecular dynamics of dissociative electron attachment (DEA) to the ammonia, methane, and methanol molecules for their well known resonances. The momentum spheres of the negative ion fragments,  $\text{H}^-$ ,  $\text{NH}^-$ ,  $\text{NH}_2^-$  from ammonia,  $\text{H}^-$ ,  $\text{CH}^-$ ,  $\text{CH}_2^-$  from methane,  $\text{H}^-$ ,  $\text{O}^-$ ,  $\text{CH}_3\text{O}^-$  from methanol, show unique angular distribution in their respective resonances, indicating each resonance involves different molecular dynamics.

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