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Energy and Angular Dependence of Dissociative Electron Attachment in CF_4[1] D. REEDY, A. L. LANDERS, A. NEMER, A. EDMONDS, G. LAURENT, M. FOGLE, Auburn University — We have observed the process of dissociative electron attachment on the tetrafluoromethane (CF_4) molecule. Different preferential attachment angles have been observed for both the $F^- + CF_3$ and $CF_3^- + F$ channels. We have also measured the kinetic energy release in the dissociation of the molecule for both channels with electron energies spanning the respective DEA resonances. Our results, obtained using Cold Target Recoil Ion Momentum Spectroscopy (COLTRIMS), contrast with recent experiments on the same system using different experimental methods.

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