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Strong-field induced multi-body fragmentation of formic acid¹ T. SEVERT, F. ZIAEE, K. BORNE, S. BHATTACHARYYA, K. D. CARNES, D. ROLLES, A. RUDENKO, I. BEN-ITZHAK, J.R. Macdonald Laboratory, Physics Department, Kansas State University, Manhattan, KS 66506, USA — We study the strong-field induced ionization and multi-body fragmentation of formic acid (HCOOH) and its isotopologue (HCOOD) using coincident three-dimensional momentum imaging. In particular, we implement the native frames method [1] to elucidate the multi-body sequential fragmentation dynamics of formic acid as well as study several bond rearrangement processes.

[1] J. Rajput *et al.*, Phys. Rev. Lett. **120**, 103001 (2018).

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