

Abstract Submitted
for the DAMOP20 Meeting of
The American Physical Society

Time-dependent photoelectron angular distributions from multiphoton ionization of molecules with broad rotational wave packets¹
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James R Macdonald Laboratory, Kansas State University — Rotational dynamics of impulsively aligned N₂ and CO₂ molecules are used to study the photoelectron angular distributions from multiphoton ionization by 266 nm pulses. Electron momentum distributions are recorded using a velocity map imaging spectrometer, Abel-inverted using the pBasex algorithm, and then fitted to delay-dependent moments of the molecular axis distributions. The analysis provides access to high-order asymmetry (β) parameters of the photoelectron angular distributions.

¹This Project is supported by Chemical Sciences, Geosciences and Biosciences Division, Office of Basic Energy Sciences, Office of Science, U.S. Department of Energy under Grant No. DE-FG02-86ER13491

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Date submitted: 02 Feb 2020

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