

PHOTODISSOCIATION OF METHYL NITRITE FROM THE S<sub>2</sub> STATE – ION IMAGES AND VECTOR CORRELATIONS

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Methyl nitrite, CH<sub>3</sub>ONO, was photodissociated near 225 nm in a velocity-mapping time-of-flight mass spectrometer. The NO photo-product was detected through state-resolved 1+1' resonance-enhanced multiphoton ionization. The NO products are highly oriented in the laboratory frame, indicating a parallel transition and a fast dissociation.