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Measurements of rotation wave packets for molecular phase modulation¹ MARK BAERTSCHY, University of Colorado at Denver, OMID MASIHZADEH, KLAUS HARTINGER, RANDY BARTELS, Colorado State University — In recent years molecular phase modulation of light has been vigorously investigated as a method for optical pulse manipulation. We characterize rotational wave packets formed by intense laser pulses using the transient index of refraction. In particular, we are looking to find optimal conditions for spectral modulation of a probe pulse. Maximizing spectral modulation requires exciting wave packets with coherences between high angular momenta.

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