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Pulse chirping in coherent control via stimulated Raman scattering SVETLANA MALINOVSKAYA, University of Michigan — Selective excitation of molecular vibrations with implementation of ultrashort chirped laser pulses is considered in stimulated Raman spectroscopy. An effective control is demonstrated via adiabatic pulse interaction with molecules. A model of two, two-level systems interacting with transform-limited pump and chirped Stokes pulse is used. The goal of creating a desired coherent superposition of states is analyzed within a dressed state picture.

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