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Suppression of Four-Wave Mixing in Hot Rubidium Vapor Using Ladder Scheme Raman Absorption[1] NIKUNJKUMAR PRAJAPATI, The College of William and Mary — We experimentally investigate the effectiveness of four-wave mixing suppression in a double-lambda interaction scheme by introducing an additional ladder-type two-photon Raman absorption resonance for one of the optical fields. We propose several possible interaction configurations involving either one or two isotopes of Rb and experimentally demonstrate the possibility of efficient four-wave mixing suppression in both EIT and far-detuned Raman cases.

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