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Effects of Frequency Chirping in Electro-Magnetically Induced Transparency FRANK A. NARDUCCI, JON P. DAVIS, Naval Air Systems Command — Under the right conditions, electro-magnetically induced transparency can lead to ultra-narrow resonances. In this paper, we explore theoretically the effects of rapidly chirping the frequency of the probe laser on the observed lineshapes. For a proper choice of parameters, the lineshape can become distorted and show asymmetric ringing-like behavior. Experimental results will also be discussed.

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