

Abstract Submitted
for the DAMOP12 Meeting of
The American Physical Society

Variation of Structure Profile for Narrow Resonances in Atomic Photoabsorption as Function of Column Density T.N. CHANG, USC, T.K. FANG, FuJen Catholic U., Taiwan — We present in detail the variation of the structure profiles for narrow doubly excited resonances in atomic photoabsorption at finite temperature as functions of column density of the target atom systems. In particular, we will examine the change in the peak cross sections, the effective full width at half maximum (FWHM) and the effective asymmetry parameter of the theoretically simulated resonance structure as the pressure varies [1]. We will also examine the temperature effects on the structure profile as the pressure varies.

[1] J. I. Lo et al, PRA 82, 012504 (2010).

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Date submitted: 27 Jan 2012

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