

Abstract Submitted  
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**Measurement of pressure broadening of the 2s-3d transition of Li by Ne and Ar** MARK ROSENBERRY, Siena College, BRIAN STEWART, Wesleyan University — Doppler-free two-photon spectroscopy offers a unique combination of advantages for line-broadening studies. The narrow lines make resolution of small changes in linewidth easily observable, while the fact that entire velocity distribution is excited ensures that a thermal distribution at the temperature of the sample is being studied. We have employed this technique in studying line broadening of the 2s-3d state of Li by Ne and Ar,. Experimental broadening rates are reported, and compared to those calculated in the impact approximation using available potentials.

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