

POLARIZATION SPECTROSCOPY OF LITHIUM DIMERS IN  $A^1\Sigma_u^+ - X^1\Sigma_u^+$  TRANSITION

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We have used polarization spectroscopy to study the  $A^1\Sigma_u^+ - X^1\Sigma_g^+$  transitions of  ${}^6\text{Li}_2$  and  ${}^6\text{Li}{}^7\text{Li}$  with high resolution. These data provide improved sets of Dunham constants for the  $A^1\Sigma_u^+$  and  $X^1\Sigma_g^+$  states and also allow us to extract the adiabatic corrections for the lithium dimer.