Abstract Submitted for the DAMOP14 Meeting of The American Physical Society

Photoionization of \text{Li}_2^1 Y. LI, M.S. PINDZOLA, C.P. BALLANCE, Department of Physics, Auburn University, Auburn, Alabama 36849, USA, J. COL-GAN, Theoretical Division, Los Alamos National Laboratory, Los Alamos, New Mexico 87545, USA — Single and double photoionization cross sections for Li₂ are calculated using a time-dependent close-coupling method. The correlation between the outer two electrons of Li₂ is obtained by relaxation of the close-coupled equations in imaginary time. Propagation of the close-coupled equations in real time yields single and double photoionization cross sections for Li₂. The two active electron cross sections are compared with one active electron distorted-wave and close-coupling results for both Li and Li₂.

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