

Abstract Submitted
for the DAMOP16 Meeting of
The American Physical Society

Numerical calculations of photoassociation of cold $^{85}\text{Rb}_2$ molecules to the $1_g(5P_{1/2})$ State THOMAS BERGEMAN¹, SUNY Stony Brook — Data obtained at the University of Connecticut by Jianbing Qi, Dajun Wang, Ye Huang, H. K. Pechkis, E. E. Eyler, P. Gould and W. C. Stwalley in 2003 have been only partially analyzed and assigned. In [1], transitions observed by Qi et al. to the 0_u^+ state were presented. Ref. [2] analyzed transitions of $^{87}\text{Rb}_2$ to the $1_g(P_{1/2})$ state, simplified by double spin polarization, observed in the D. Heinzen Laboratory. Transitions to 0_g^- and 1_g levels without double spin polarization are more problematical. This is a preliminary report, based on data obtained by Qi et al. with a dense array of spectral lines, having certain signal:noise limitations.

1. T. Bergeman *et al.*, J. Phys. B **38** S813 (2006).
2. C.-C. Tsai, T. Bergeman, E. Tiesinga, P. Julienne and D. Heinzen, Phys. Rev. A **88**, 052509 (2013).

¹Supported by US NSF

Thomas Bergeman
SUNY Stony Brook

Date submitted: 28 Jan 2016

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