

Abstract Submitted  
for the DAMOP20 Meeting of  
The American Physical Society

**Precision spectroscopy in neutral beryllium-9**<sup>1</sup> ERYN COOK,  
MOLLY HERZOG, ESTHER KERNS, CHELSEA PEREZ, WILLIAM  
WILLIAMS, Smith College — Four-electron systems are the current testing ground  
for many advanced theoretical models and also tests of quantum electrodynamics.  
We present our current progress on updated experimental measurements for a variety  
of energy levels in neutral beryllium-9, compare them to current theoretical predic-  
tions, and motivate future theoretical calculations to compare to these experimental  
results.

<sup>1</sup>The authors acknowledge support from NSF PHY-1428112 (MRI); NSF PHY-  
1555232 (CAREER).

Eryn Cook  
Smith College

Date submitted: 31 Jan 2020

Electronic form version 1.4