

## PHOTOELECTRON SPECTROSCOPY OF THE BERYLLIUM PENTAMER ANION

NOAH B. JAFFE, DAVID ARCHIE STEWART, *Department of Chemistry, Emory University, Atlanta, GA, USA*; JOHN F. STANTON, *Quantum Theory Project, University of Florida, Gainesville, FL, USA*; MICHAEL HEAVEN, *Department of Chemistry, Emory University, Atlanta, GA, USA*.

Beryllium is known to be a challenging test for even high level ab initio methods due to high electron correlation contributions. There is fundamental interest in understanding how well computational methods can predict physical properties of beryllium containing molecules, but very little available experimental data on these molecules. We have continued in our exploration of pure beryllium clusters, and have acquired preliminary spectra for the beryllium pentamer  $\text{Be}_5$ . In this talk we will present our work to date on  $\text{Be}_5$ , with comparisons to theory and the Beryllium tetramer