

Abstract Submitted
for the DAMOP05 Meeting of
The American Physical Society

***Ab initio* Study of Dissociative Electron Attachment to ClCN and BrCN** J. ROYAL, Department of Applied Science, University of California at Davis, California 95616, A. E. OREL — ClCN and BrCN are pseudobihalogenes, that is both CN and Cl/Br have positive electron affinities. This means that dissociative electron attachment is possible into two final fragment channels, CN^- and Cl^-/Br^- . The resonance parameters for this system are obtained from electron scattering calculations using the Complex Kohn Variational method. These resonance parameters are used as input into both a time-dependent wave packet calculation and a time-independent calculation using the discrete variable representation and exterior complex scaling. The calculated cross sections will be reported and compared to available experiment. Work supported by the NSF PHY-02-44911 and from The Center for Biophotonics, an NSF Science and Technology Center PHY 0120999.

Jeanna Royal
UC Davis

Date submitted: 28 Jan 2005

Electronic form version 1.4