Tunneling Splitting in the Rotationally Resolved Electronic Spectrum of 1,3-Benzodioxole\textsuperscript{1} JESSICA A. THOMAS, LEONARDO ALVAREZ-VALTIERRA, DAVID W. PRATT, University of Pittsburgh — Gas phase rotationally resolved electronic spectra were collected for the origin and several vibronic transitions of 1,3- benzodioxole. For each band, an autocorrelation program identified the presence of two overlapping spectra which were each fit using a least-squares algorithm to determine the rotational constants. Interpretation of these constants and how they change from one band to the next gives information about the physical causes of this splitting, which will be discussed.

\textsuperscript{1}Work supported by NSF (CHE-0615755)