Electron Diffraction by Benzene Molecule in Real Time KYLE SHERBERT, JIA-AN YAN, Towson Univ — By solving the time-dependent Schrödinger equation in real space and in real time, we study the electron diffraction by a benzene molecule ($C_6H_6$). Due to the wave nature of the electron, the scattered wave packet forms interesting diffraction patterns. The possibility of reconstructing the molecular structure from these patterns will be discussed.