\textbf{14N (p,p) Scattering with the KN Van de Graff Accelerator}

STEPHANIE LYONS, Randolph College, MICHAEL WIESCHER, University of Notre Dame — The $^{14}$N (p,p) scattering experiment was performed with the 4 MV KN Van de Graff Accelerator at the Nuclear Structure Laboratory at the University of Notre Dame. The KN experienced many problems throughout the experiment requiring several belt changes, a change of the drive motor bearings, and a resistor check. The first run of data was converted to cross-sections, and normalized to 30°, which was assumed to be completely Rutherford. Resonances were found at 1.06, 1.55, 1.74, 1.80, 2.34, and 2.47 MeV. These values correlated with previous work done. Further experimentation will be required to clarify the resonances and verify that the scattering at 30° is completely Rutherford.