

**Measuring Planck’s Constant Using**

**Light Emitting Diodes**

Jeromy Gress

Advisor: Dr. Natalia Dushkina

A spectrometer is be utilized to measure the wavelength (*λ*) of several different colored light-emitting diodes (LEDs). A calculation using the Planck-Einstein equation, along with the threshold voltage (*V*0) and wavelength is performed to determine the value of Planck’s constant (*h*). Values for the threshold voltage were obtained using LoggerPro to take measurement of voltages across the circuit. An experimental value of Planck’s constant was determined to be (1.41± 0.44) × 10-33 J.s.