Hi everyone I’m River Schmidt-Eder from Carleton College in Minnesota, and my mentor and I will be studying the production of re-ionzied hydrogen throughout the early universe. These photons are interesting because their production correlates with the formation of galaxies in our universe’s early history. To calculate the production of these particles we will be examining the size of galaxies from several factors of Z away. Our work is possible using data from the James Web Telescope which fortunately has equipment sensitive enough to capture high-quality data relevant to these re-ionized particles produced by these very distant galaxies.