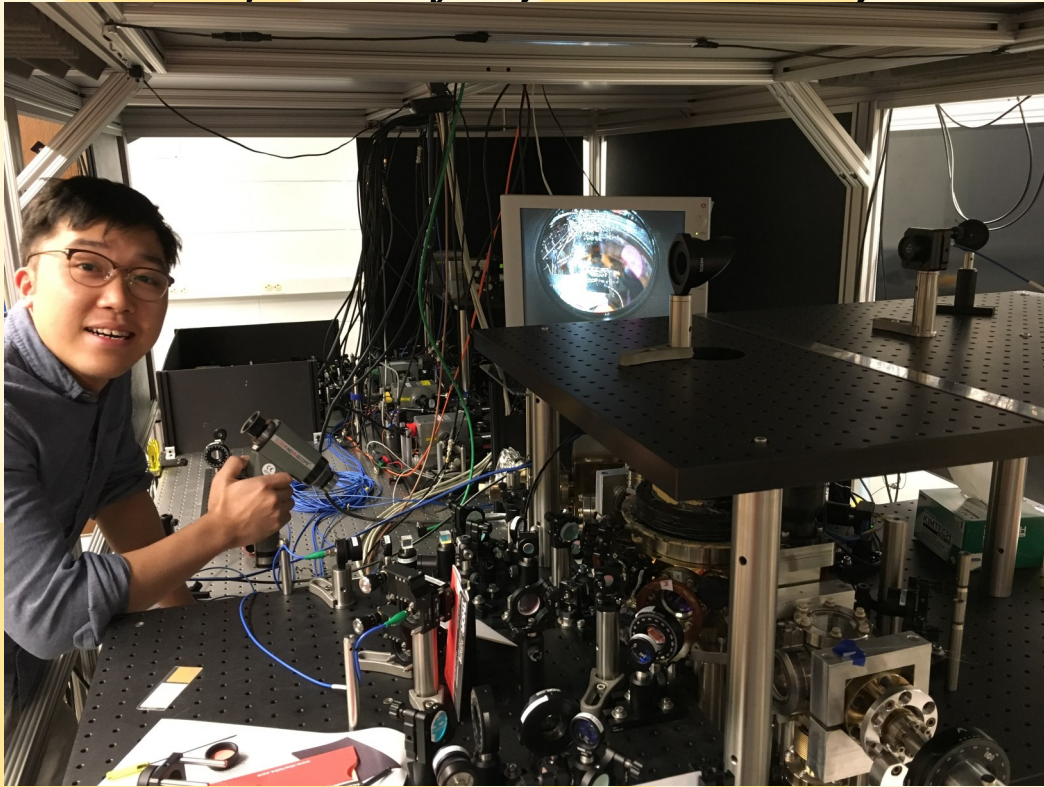


## *Department of Physics and Astronomy*



### Summer 2017— Zhuo Hann Cheah

Dr. Hung's Group

My name is Zhuo Hann Cheah, a rising senior with a major in Physics and a minor in Electrical and Computer Engineering. During the summer of 2017, I worked in Prof. Hung's quantum gas and quantum optics laboratory, a lab that is interested in using cold atoms and nanophotonics to engineer novel quantum materials. I normally work on the electronics and optics of the experiments. During the summer, I designed, printed, and built multiple circuits that will be used to carefully negate magnetic field to manipulate laser-cooled atoms. I also worked on laser spectroscopy and frequency stabilization using Doppler-free dichroic lock (DFDL) technique. During my time working in Prof. Hung's lab, with the hands-on experience, I have learned a lot about lasers and electronics. A truly valuable experience.