Temperature Controlling Digital Cameras for Time-Resolved Angle-Resolved Photoemission Spectroscopy ALEXANDER NGUYEN, GREGORY AFFELDT, KENNETH GOTLIEB, ALESSANDRA LANZARA, University of California, Berkeley — Angle-resolved photoemission spectroscopy experiments (ARPES) use charged couple device (CCD) detectors to measure the spectra of various material. A CCD measures the number of photons that hit it; a problem with CCDs is that thermal energy can create false photon counts. By building a temperature controller the CCD’s temperature is lowered to reduce the number of false counts, similarly, the temperature controller keeps the temperature stable reducing the randomness in false counts.