

Abstract Submitted  
for the MAR16 Meeting of  
The American Physical Society

**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.

Alexander Nguyen  
University of California, Berkeley

Date submitted: 06 Nov 2015

Electronic form version 1.4