**ARPES Studies on** $\text{FeTe}_{1-x}\text{Se}_x$  

HONGBO YANG, ZHIHUI PAN, GENDA GU, PETER JOHNSON, Condensed Matter Physics and Materials Science Department, Brookhaven National Laboratory, MICHAEL WEINERT, Department of Physics, University of Wisconsin - Milwaukee — Angle-resolved Photoelectron Spectoscopy (ARPES) is used to study the electronic structure of Fe based superconductor, $\text{FeTe}_{1-x}\text{Se}_x$. Detailed comparisons are made between the measured Fermi surfaces and first principles FLAPW calculations. In particular we explore the origin of a Dirac like cone at the center of the Brillouin zone.

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