Abstract Submitted for the MAR08 Meeting of The American Physical Society

Angle resolved photoemission studies of YbRh<sub>2</sub>(Si<sub>1-x</sub>Ge<sub>x</sub>)<sub>2</sub> S.-K. MO, K. TANAKA, N. MANNELLA, Stanford University and Advanced Light Source, C. CAPAN, D.J. KIM, Z. FISK, UC Irvine, Z. HUSSAIN, Advanced Light Source, Z.-X. SHEN, Stanford University — YbRh<sub>2</sub>(Si<sub>1-x</sub>Ge<sub>x</sub>)<sub>2</sub> has attracted a lot of attention as the first Yb-based system with a quantum critical point (QCP) at  $x \sim 0.05$ . The QCP can be tuned by either magnetic field or chemical substitution, and non Fermi liquid properties have been observed in the vicinity of it. We present high-resolution angle resolved photoemission data on this compound as a function of Ge-doping. The result will be discussed in conjunction with various theoretical proposals on the Fermi surface topology of this material.

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