

Abstract Submitted  
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**ARPES study of the Fermi Surface in the Underdoped Bi2212**<sup>1</sup> HONGBO YANG, JONATHAN RAMEAU, ZHIHUI PAN, GENDA GU, Brookhaven National Laboratory, DAVID HINKS, Argonne National Laboratory, PETER JOHNSON, Brookhaven National Laboratory — We examine the structure and temperature dependence of the Fermi surface for an underdoped  $T_c = 45$  K sample and compare it with the  $T_c = 65$  K sample studied elsewhere. We find, that these materials show little temperature dependence in the Fermi arc length and further find that the “Fermi pocket” partially enclosed by the arc appears to scale with the doping level.

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