Abstract Submitted for the MAR05 Meeting of The American Physical Society

Forced localization in thin K films, investigated with the superconducting proximity effect MANJIANG ZHANG, GERD BERGMANN, Dept. of Physics and Astronomy, University of Southern California — Thin films of alkali metals are forced into an insulating state by being covered with sub-mono-layers of Pb. The superconducting proximity effect is used to investigate the electronic change in the alkali film. On the length scale of the film thickness the electronic properties of the alkali film do not change noticeably during the metal-insulator transition.

> Manjiang Zhang Univ. of Southern California

Date submitted: 30 Nov 2004

Electronic form version 1.4