On Mott's Formula for the Acconductivity in the Anderson Model

Abel Klein

aklein@math.uci.edu

Department of Mathematics
University of California, Irvine
243 Multipurpose Science & Technology Building
Irvine, CA 92697-3875
USA

Abstract

We prove that the ac conductivity at small frequency ν is bounded by $C\nu^2|\log\nu|^{d+2}$. This should be compared to the celebrated Mott's formula, which predicts the leading term to be $C\nu^2|\log\nu|^{d+1}$.