



The University of Chicago
Department of Statistics
Seminars for Second Year PhD Students

ZUOHENG WANG

Department of Statistics
The University of Chicago

“Association Test by Adjusting for Population Heterogeneity”

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ABSTRACT

In the presence of population heterogeneity, the traditional case-control association studies may generate false-positive result. Family-based methods can be used because of their insensitivity to population heterogeneity. By expressing the null hypothesis in terms of a fully specified conditional distribution of the family data given genotype information for the family, some of which may not be observed, a test statistic can be devised and the test has correct conditional type I error rate. Overall the test is desired regardless of patterns of population admixture and misspecified haplotype frequencies. This talk is based on the paper by Rabinowitz (2002).