

Near-consistent robust estimations of moments for unimodal distributions

Tuban Lee

This manuscript was compiled on June 7, 2023

1 **A. Invariant Moments.** All commonly used robust location es-
2 timators are symmetric, and therefore, asymptotically coin-
3 cide in any symmetric distributions. A γ -weighted Hodges-
4 Lehmann mean ($\text{WHLM}_{k,\epsilon,\gamma,n}$) can approach the population
5 mean in any γ -symmetric distribution.

DRAFT