

On the convergence rate of Stratified Permutation Statistics

XIAO-FENG GUO^{1,a}, SONG-HAO LIU^{2,d}, QI-MAN SHAO^{1,3,b} and JING-YU XU^{1,c}

¹*Department of Statistics and Data Science, Southern University of Science and Technology, Shenzhen, Guangdong, 518055, China, ^aguoxf@sustech.edu.cn, ^bshaoqm@sustech.edu.cn, ^c12131253@mail.sustech.edu.cn*

²*School of Mathematical Sciences, Dalian University of Technology, Dalian, Liaoning, China, ^dliusonghao@dlut.edu.cn*

³*Department of Statistics and Data Science, Shenzhen International Center for Mathematics, Southern University of Science and Technology, Shenzhen, Guangdong, 518055, China, ^bshaoqm@sustech.edu.cn*

The stratified linear permutation statistic arises in various statistics problems, including stratified and post-stratified survey sampling, stratified and post-stratified experiments, conditional permutation tests, etc.

Keywords: Cramér-type moderate deviation; Stein's Method

1. Introduction

2. Main Results

3. Proofs

References