论文

SYMMETRIC AND SKEW-SYMMETRIC PROCRUSTES STATISTICS AND THEIR APPLICATIONS

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摘要　　　In this paper, we give the calculation formulae and some properties of symmetric andskew-symmetric procrustes statistics and related transformation matrices. We use the procrustes statistic to provide an overall picture of the response of the classical scaling method to small errors by making expansions in powers of the error term, and retaining the lowest non-cancelling power. A perturbation theory for this is worked out, and is shown to lead to a distribution theory.

关键词　　　Procrustes statistics, symmetric, skew-s

分类号

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Key words Procrustes statistics   symmetric   skew-symmetric   classical scaling   MDS   perturbation theory   robus

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