

学术论文

高维纵向数据群点的刚体结构检验方法

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摘要 本文中, 我们提出一种检验高维纵向数据群点在运动中是否保持刚体结构的方法, 并给出高维群点变形系数的定义. 对群点刚体结构的检验, 可以把握群点运动的主要特征, 并便于对群点的未来运动趋势做总体预测. 通过仿真案例以及分析比较中国东部、西部城市群的经济的发展过程中多元性的变化, 验证了方法的合理性和应用价值.

关键词 [纵向数据](#), [刚体结构](#), [假设检验](#).

分类号

A Test for Rigid Structure of the Grouped Points in High-Dimensional Data

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Abstract In this paper, we propose a test to check whether in motion, the point groups of high-dimensional longitudinal data keep a rigid structure and suggest a definition of transmutation coefficient of the groups. In terms of testing the rigid structure, the major characters of the motion of the groups can be handled so that the prediction for the motion in future can be expected. To demonstrate the rationale and potential use of the method, simulations and an analysis for the diversity of economic changes between the city group in the east China and the

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city group in the west China have been carried out.

Key words

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