

论文与报告

差分模型参数递推估计的Householder变换法

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摘要

本文提出了利用Householder变换进行差分模型参数递推估计的新方法. 并由该方法导出了新的递推最小二乘法、递推增广矩阵法、递推广义最小二乘法、递推极大似然法. 文中分单变量、多变量两种情况重点讨论了新递推最小二乘法及其与传统递推最小二乘法的比较, 并给出了计算实例.

关键词 [参数估计](#) [递推算法](#) [Housholder变换](#)

分类号

A Recursive Householder Transformation Method for Parameter Estimation of Difference Model

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Abstract

A new recursive Householder transformation method for parameter estimation of the difference model is proposed. Based on the new method, a series of new recursive algorithms, such as the new recursive least squares algorithm, the generalized least squares algorithm, the extended matrix algorithm, and the maximum likelihood algorithm are constructed. The new recursive least squares algorithms for both single and multiple variable cases and a comparison between these new algorithms and the traditional ones are discussed in detail. At last, several examples are given.

Key words [Parameter estimation](#) [recursive algorithm](#) [Housholder transformation](#)

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