#### 数学 统计学

## 随机差分方程的比较定理(英)

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摘要 研究一类由随机序列驱动的非线性随机差分方程;给出了该类方程的两个比较定理;并作为比较定理的应用,给出了随机差分方程的解的p-阶矩稳定和p-阶矩有界的判别条件.

关键词 随机差分方程 比较定理 p-阶矩稳定性 p-阶矩有界性

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# Comparison theorems of stochastic difference equations (English)

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#### **Abstract**

This paper studied a kind of nonlinear stochastic difference equations, whose randomness is driven by a stochastic series. Two comparison theorems were obtained. At last, p-moment stability and p-moment boundedness of solutions to stochastic difference equations were presented as applications of obtained comparison theorems.

#### **Key words**

<u>stochastic difference equation</u> <u>comparison theorem</u> <u>p-moment stability</u> <u>p-moment boundedness</u>

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