

论文与报告

非线性参数化实系数多项式族稳定性分析

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摘要

利用多项式系数空间中距离的概念,讨论了非线性参数化实系数多项式族D-稳定性检验问题.证明了单点检验的存在性,并给出多项式族满足边界检验的充分条件.最后,对不满足边界检验的多项式族,给出了确定其D-稳定性的低维检验方法.

关键词 [多项式族](#) [稳定性检验](#) [边界检验](#)

分类号

Stability Analysis on the Family of Nonlinearly Parameterized Real Polynomials

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Abstract

In this paper, the problem of D-stability testing for the family of nonlinearly parameterized real polynomial is studied by using the concept of distance in the coefficient space. The existence of single point testing is proved, and the sufficient condition to determine the family satisfying boundary testing is given. For the case that the family does not satisfy boundary testing, a low dimensional testing method to determine its D-stability is presented.

Key words [Polynomial family](#) [stability testing](#) [boundary testing](#)

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