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论文

STABILITY ROBUSTNESS MEASURES OF LINEAR STATE-SMCE MODELS WITH STRUCTURED PERTURBATIONSCAO Dengqing

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摘要 This paper considers the robust stability of state-space models of linear systems subject to real structured perturbations. The "Zero exclusion principle ", which is based on the properties of the Kronecker product and the bialternate product, is employed to derive the new robust stability bounds for time-invariant perturbations. Vaious examples are presented to demonstrate the merit of the method proposed. The examples show that the new bounds are easy to compute numerically and can expect an arbitrary degree of improvement over the previous ones reported by the Lyapunov stability method and the frequency domain approach.

关键词 Robust stability, linear uncertain syste

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Key words Robust stability linear uncertain systems structured perturbations matrisapproach

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