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Robust Stabilization of Uncertain Jerk Chaotic Control Systems with Mixed Uncertainties

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Abstract: In this paper, the problem of robust stabilizability of jerk chaotic control systems with mixed uncertainties is investigated. Combining robust control theory and differential-integral inequalities, a nonlinear controller will be derived and guaranteed to achieve the goal of practical stabilization. Besides, both the convergence radius and the exponential convergence rate can be specified in advance. Finally, some numerical simulation results are supplemented to demonstrate the correctness and effectiveness of the main result

Keywords: Robust Stabilization, Uncertain systems, Chaotic system, Mixed Uncertainties

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