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Robust Adaptive Controller Design for Uncertain Second-Order Jerk Chaotic Systems

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Abstract: *In this paper, the stabilization problem for a class of uncertain second-order jerk chaotic control systems is investigated. Combining differential and integral inequalities with nonlinear theory, we intend to construct a robust adaptive controller to promote a class of uncertain second-order jerk chaotic control systems to achieve the goal of adaptive stability. Finally, an example will be provided to illustrate the design process of the adaptive controller, and some numerical simulation results will be offered to demonstrate the correctness and effectiveness of the main result.*

Keywords: Robust adaptive controller, Uncertain systems, Chaotic system, Multiple uncertainties

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