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Nota di contenuto	Motivation and Contents of the Monograph.-Stability and Convergence Analysis of Self-Tuning Control Systems -- Further Results On Stability and Convergence of Self-Tuning Control Systems -- Stable Weighted Multiple Model Adaptive Control: Continuous-Time Plant -- Stable Weighted Multiple Model Adaptive Control: Discrete-Time Stochastic Plant -- Further Results on Stable Weighted Multiple Model Adaptive Control: Discrete-Time Stochastic Plant -- Stability of Continuous-Time T-S Model Based Fuzzy Control Systems -- Appendix A Lemma and proofs for Chapter 2 -- Appendix B Lemma and Proofs for Chapter 4 -- Appendix C Lemma and proofs for Chapter 6 -- Appendix D Lemma and proofs for Chapter 7.
Sommario/riassunto	This book puts forward the concept of a virtual equivalent system (VES) based on theoretical analysis and simulation results. The new concept will facilitate the development of a unied framework for analyzing the stability and convergence of self-tuning control (STC) systems, and potentially, of all adaptive control systems. The book then shows that a time-varying STC system can be converted into a time-invariant system using a certain nonlinear compensation signal, which reduces the complexity and diculty of stability and convergence analysis. In closing, the VES concept and methodology are used to assess the

stability of multiple model adaptive control (MMAC) systems and T-S model-based fuzzy control systems.