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	Nota di contenuto	Tapas: Theory Combinations and Practical Applications -- Max-plus Algebraic Tools for Discrete Event Systems, Static Analysis, and Zero-Sum Games -- Approximations of Discrete, Continuous, and Hybrid Systems -- Volume and Entropy of Regular Timed Languages: Analytic Approach -- Synthesis of Non-Interferent Timed Systems -- Critical Paths in the Partial Order Unfolding of a Stochastic Petri Net -- Speeding Up Model Checking of Timed-Models by Combining Scenario

Specialization and Live Component Analysis -- Efficient on-the-fly Algorithm for Checking Alternating Timed Simulation -- Model Checking Logic WCTL with Multi Constrained Modalities on One Clock Priced Timed Automata -- Safe Runtime Verification of Real-Time Properties -- Removing All Silent Transitions from Timed Automata -- Realizability of Real-Time Logics -- Revisiting Decidability and Optimum Reachability for Multi-Priced Timed Automata -- Analyzing Real-Time Event-Driven Programs -- A Compositional Translation of Timed Automata with Deadlines to Uppaal Timed Automata -- Compositional Abstraction for Stochastic Systems -- Stochastic Games for Verification of Probabilistic Timed Automata -- Checking Timed Büchi Automata Emptiness Using LU-Abstractions -- On the Supports of Recognizable Timed Series -- Machine-Assisted Parameter Synthesis of the Biphase Mark Protocol Using Event Order Abstraction -- Exploiting Timed Automata for Conformance Testing of Power Measurements.

| Sommario/riassunto | This book constitutes the refereed proceedings of the 7th International Conference on Formal Modeling and Analysis of Timed Systems, FORMATS 2009, held in Budapest, Hungary, September 2009. The 18 revised full papers presented together with 4 invited talks were carefully reviewed and selected from 40 submissions. The aim of FORMATS is to promote the study of fundamental and practical aspects of timed systems, and to bring together researchers from different disciplines that share interests in the modelling and analysis of timed systems.Typical topics include (but are not limited to): – Foundations and Semantics. Theoretical foundations of timed systems and languages; comparison between different models (timed automata, timed Petri nets, hybrid automata, timed process algebra, max-plus algebra, probabilistic models). – Methods and Tools. Techniques, algorithms, data structures, and software tools for analyzing timed systems and resolving temporal constraints (scheduling, worst-case execution time analysis, optimization, model checking, testing, constraint solving, etc.). – Applications. Adaptation and specialization of timing technology in application domains in which timing plays an important role (real-time software, hardware circuits, and problems of scheduling in manufacturing and telecommunication). |