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Titolo	Foundations of Software Science and Computation Structures [[electronic resource]] : 18th International Conference, FOSSACS 2015, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2015, London, UK, April 11-18, 2015, Proceedings / / edited by Andrew Pitts
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Descrizione fisica	1 online resource (XVI, 465 p. 92 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 9034
Disciplina	005.1
Soggetti	Computer science Machine theory Compilers (Computer programs) Software engineering Computer Science Logic and Foundations of Programming Formal Languages and Automata Theory Compilers and Interpreters Software Engineering Theory of Computation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Invited Talk -- Polarized Substructural Session Types -- Semantics of Programming Languages I -- Synthesis of Strategies and the Hoare Logic of Angelic Nondeterminism -- An Infinitary Model of Linear Logic -- Game Semantics and Normalization by Evaluation -- Foundations of Differential Dataflow -- Categorical Models and Logics -- States of Convex Sets -- A Categorical Semantics for Linear Logical Frameworks -- A Completeness Result for Finite -bisimulations -- Sequent Calculus in the Topos of Trees -- Modal and Temporal Logics -- Coalgebraic Trace Semantics via Forgetful Logics -- Unifying Hyper and Epistemic Temporal Logics -- Concurrent, Probabilistic and Timed Systems On the Total Variation Distance of Semi-Markov Chains --

Decidable and Expressive Classes of Probabilistic Automata -- Knowledge = Observation + Memory + Computation -- Compositional Metric Reasoning with Probabilistic Process Calculi -- Semantics of Programming Languages II -- Fragments of ML Decidable by Nested Data Class Memory Automata -- Operational Nominal Game Semantics -- Step-Indexed Logical Relations for Probability -- Automata, Games, Verification -- Minimisation of Multiplicity Tree Automata -- Robust Multidimensional Mean-Payoff Games are Undecidable -- The Cyclic-Routing UAV Problem Is PSPACE-Complete -- Typing Weak MSOL Properties -- Logical Aspects of Computational Complexity Three Variables Suffice for Real-Time Logic -- On Presburger Arithmetic Extended with Modulo Counting Quantifiers -- Parity Games of Bounded Tree- and Clique-Width -- Type Theory, Proof Theory and Implicit Computational Complexity -- Programming and Reasoning with Guarded Recursion for Coinductive Types -- The Computational Contents of Ramified Corecurrence -- On the Dependencies of Logical Rules -- On the Mints Hierarchy in First-Order Intuitionistic Logic.

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#### Sommario/riassunto

This book constitutes the proceedings of the 18th International Conference on Foundations of Software Science and Computation Structures, FOSSACS 2015, held in London, UK, in April 2015, as part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2015. The 28 full papers presented in this volume were carefully reviewed and selected from 93 submissions. They are organized in topical sections named: semantics of programming languages; categorical models and logics; concurrent, probabilistic and timed systems; automata, games, verification; logical aspects of computational complexity; and type theory, proof theory and implicit computational complexity. The book also contains one full paper invited talk.

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