Record Nr. UNINA9910483633903321 Algebra and Coalgebra in Computer Science: 5th International **Titolo** Conference, CALCO 2013, Warsaw, Poland, September 3-6, 2013. Proceedings / / edited by Reiko Heckel, Stefan Milius Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2013 **ISBN** 3-642-40206-2 Edizione [1st ed. 2013.] 1 online resource (XIV, 359 p. 29 illus.) Descrizione fisica Theoretical Computer Science and General Issues, , 2512-2029;; 8089 Collana Disciplina 004.0151 Soggetti Computer science Software engineering Quantum computers Computer science—Mathematics Theory of Computation Software Engineering **Quantum Computing** Symbolic and Algebraic Manipulation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Invited Talks -- An Effect System for Algebraic Effects and Handlers --Automata and Algebras for Infinite Words and Trees -- Positive Inductive-Recursive Definitions -- Coalgebraic up-to techniques --Contributed Papers -- Exploiting Algebraic Laws to Improve Mechanized Axiomatization -- Positive Fragments of Coalgebraic Logics -- Many-valued Relation Lifting and Moss' Coalgebraic Logic --Saturated Semantics for Coalgebraic Logic Programming -- Presenting Distributive Laws -- Interaction and observation: categorical semantics of reactive systems trough dialgebras -- Homomorphisms of coalgebras from predicate liftings -- From Kleisli Categories to Commutative C\*-algebras: Probabilistic Gelfand Duality -- Trace Semantics via Generic Observations -- Full abstraction for fair testing

in CCS -- A simple case of rationality of escalation -- Coalgebras with Symmetries and Modelling Quantum Systems -- From Operational Chu

Duality to Coalgebraic Quantum Symmetry -- Noninterfering Schedulers/When Possibilistic Noninterference Implies Probabilistic Noninterference -- Simulations and Bisimulations For Coalgebraic Modal Logics -- A Coalgebraic View of "-Transitions -- Nets, relations and linking diagrams -- A Logic-Programming Semantics of Services -- CALCO-Tools Workshop -- Preface to CALCO-Tools -- Checking Conservativity With Hets -- The HI-Maude Tool -- Constructor-based Inductive Theorem Prover -- A Timed CTL Model Checker for Real-Time Maude -- Hybridisation at Work -- Penrose: Putting Compositionality to Work For Petri Net Reachability -- QStream: A Suite of Streams.

## Sommario/riassunto

This book constitutes the refereed proceedings of the 5th International Conference on Algebra and Coalgebra in Computer Science, CALCO 2013, held in Warsaw, Poland, in September 2013. The 18 full papers presented together with 4 invited talks were carefully reviewed and selected from 33 submissions. The papers cover topics in the fields of abstract models and logics, specialized models and calculi, algebraic and coalgebraic semantics, system specification and verification, as well as corecursion in programming languages, and algebra and coalgebra in quantum computing. The book also includes 6 papers from the CALCO Tools Workshop, co-located with CALCO 2013 and dedicated to tools based on algebraic and/or coalgebraic principles.