Record Nr. UNISA996465292903316 Semantics and Algebraic Specification [[electronic resource]]: Essays **Titolo** Dedicated to Peter D. Mosses on the Occasion of His 60th Birthday // edited by Jens Palsberg Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-642-04164-7 Edizione [1st ed. 2009.] Descrizione fisica 1 online resource (X, 409 p.) Collana Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5700 Classificazione **DAT 510f DAT 557f** SS 4800 004 Disciplina Soggetti Computer programming Software engineering Compilers (Computer programs) Computer science Machine theory **Programming Techniques** Software Engineering Compilers and Interpreters Computer Science Logic and Foundations of Programming Formal Languages and Automata Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Tribute to Peter Mosses -- Action Semantics in Retrospect --Component-Based Security Policy Design with Colored Petri Nets --Order-Sorted Parameterization and Induction -- An Implementation of Object-Oriented Action Semantics in Maude -- A Constructive

Semantics for Basic Aspect Constructs -- Structural Operational

Verification of Model Transformations -- Towards Compatible and Interderivable Semantic Specifications for the Scheme Programming Language, Part I: Denotational Semantics, Natural Semantics, and

Semantics for Weighted Transition Systems -- On the Specification and

Abstract Machines -- Towards Compatible and Interderivable Semantic Specifications for the Scheme Programming Language, Part II: Reduction Semantics and Abstract Machines -- Type Checking Evolving Languages with MSOS -- Action Algebras and Model Algebras in Denotational Semantics -- Mobile Processes and Termination -- An Action Semantics Based on Two Combinators -- Converting between Combinatory Reduction Systems and Big Step Semantics -- Model-Based Testing and the UML Testing Profile -- A Complete, Co-inductive Syntactic Theory of Sequential Control and State -- Vertical Object Layout and Compression for Fixed Heaps.

Sommario/riassunto

This Festschrift volume, published to honor Peter D. Mosses on the occasion of his 60th birthday, includes 17 invited chapters by many of Peter's coauthors, collaborators, close colleagues, and former students. Peter D. Mosses is known for his many contributions in the area of formal program semantics. In particular he developed action semantics, a combination of denotational, operational and algebraic semantics. The presentations - given on a symposium in his honor in Udine, Italy, on September 10, 2009 - were on subjects related to Peter's many technical contributions and they were a tribute to his lasting impact on the field. Topics addressed by the papers are action semantics, security policy design, colored petri nets, order-sorted parameterization and induction, object-oriented action semantics, structural operational semantics, model transformations, the scheme programming language, type checking, action algebras, and denotational semantics.