Record Nr. UNISA996465867103316 Formal Methods for Components and Objects [[electronic resource]]: **Titolo** Third International Symposium, FMCO 2004, Leiden, The Netherlands. November 2-5, 2004, Revised Lectures // edited by Frank S. de Boer, Marcello M. Bonsangue, Susanne Graf, Willem-Paul de Roever Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2005 Edizione [1st ed. 2005.] 1 online resource (VIII, 328 p.) Descrizione fisica Programming and Software Engineering;; 3657 Collana Disciplina 005.13/1 Software engineering Soggetti Programming languages (Electronic computers) Computer logic Operating systems (Computers) Software Engineering/Programming and Operating Systems Software Engineering Programming Languages, Compilers, Interpreters Logics and Meanings of Programs Operating Systems 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 A Theory of Predicate-Complete Test Coverage and Generation -- A Perspective on Component Refinement -- A Fully Abstract Semantics for UML Components -- From (Meta) Objects to Aspects: A Java and AspectJ Point of View -- MoMo: A Modal Logic for Reasoning About Mobility -- Probabilistic Linda-Based Coordination Languages --Games with Secure Equilibria, -- Priced Timed Automata: Algorithms and Applications -- rCOS: Refinement of Component and Object Systems -- Program Generation and Components -- Assertion-Based Encapsulation, Object Invariants and Simulations -- A Dynamic Binding Strategy for Multiple Inheritance and Asynchronously Communicating Objects -- Observability, Connectivity, and Replay in a Sequential Calculus of Classes -- Timing Analysis and Timing Predictability.

## Sommario/riassunto

Formal methods have been applied successfully to the verification of medium-sized programs in protocol and hardware design. However, their application to the development of large systems requires more emphasis on specification, modelling and validation techniques supporting the concepts of reusability and modifiability, and their implementation in new extensions of existing programming languages. This book presents revised tutorial lectures given by invited speakers at the Third International Symposium on Formal Methods for Components and Objects, FMCO 2004, held in Leiden, The Netherlands, in November 2004. The 14 revised lectures by leading researchers present a comprehensive account of the potential of formal methods applied to large and complex software systems such as component-based systems and object systems. The book provides an unique combination of ideas on software engineering and formal methods that reflect the expanding body of knowledge on modern software systems.

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Titolo Horizons of the Mind. A Tribute to Prakash Panangaden: Essays

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Sommario/riassunto

This Festschrift volume contains papers presented at a conference, Prakash Fest, held in honor of Prakash Panangaden, in Oxford, UK, in May 2014, to celebrate his 60th birthday. Prakash Panangaden has worked on a large variety of topics including probabilistic and concurrent computation, logics and duality and quantum information and computation. Despite the enormous breadth of his research, he has made significant and deep contributions. For example, he introduced logic and a real-valued interpretation of the logic to capture equivalence of probabilistic processes quantitatively. The 25 papers included in this volume were carefully reviewed. They cover a large variety of topics in theoretical computer science.