Record Nr. UNINA9910143896703321 Graph Transformation: First International Conference, ICGT 2002, **Titolo** Barcelona, Spain, October 7-12, 2002, Proceedings / / edited by Andrea Corradini, Hartmut Ehrig, Hans-Jörg Kreowski, Grzegorz Rozenberg Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2002 **ISBN** 3-540-45832-8 Edizione [1st ed. 2002.] Descrizione fisica 1 online resource (X, 466 p.) Collana Lecture Notes in Computer Science, , 0302-9743 ; ; 2505 Disciplina 511/.5 Soggetti Optical data processing Discrete mathematics Database management Computer science—Mathematics Data structures (Computer science) Software engineering Image Processing and Computer Vision Discrete Mathematics **Database Management** Discrete Mathematics in Computer Science **Data Structures** Software Engineering 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 Invited Papers -- Ubiquitous, Decentralized, and Evolving Software: Challenges for Software Engineering -- Can Behavioral Requirements Be Executed? (And Why Would We Want to Do So?) -- Biographs as a Model for Mobile Interaction -- Contributed Papers -- Approximating the Behaviour of Graph Transformation Systems -- Transforming Specification Architectures by GenGED -- Decomposing Graphs with Symmetries -- Graph Transformations for the Vehicle Routing and Job

Shop Scheduling Problems -- Call-by-Value ?-Graph Rewriting Without

Rewriting -- Transformation: The Missing Link of MDA -- Termination Detection of Distributed Algorithms by Graph Relabelling Systems --Graph Transformation with Time: Causality and Logical Clocks --Relabelling in Graph Transformation -- Euler Graphs, Triangle-Free Graphs and Bipartite Graphs in Switching Classes -- Confluence of Typed Attributed Graph Transformation Systems -- Abstraction and Control for Shapely Nested Graph Transformation -- Hyperedge Substitution in Basic Atom-Replacement Languages -- Distributed Graph Transformation Units -- Describing Policies with Graph Constraints and Rules -- Computer Aided Multi-paradigm Modelling to Process Petri-Nets and Statecharts -- Using Graph Transformation as the Semantical Model for Software Process Execution in the APSEE Environment -- Graph-Based Reengineering of Telecommunication Systems -- Formalising Behaviour Preserving Program Transformations -- Unparsing of Diagrams with DiaGen -- Linear Ordered Graph Grammars and Their Algebraic Foundations -- Rule Invariants in Graph Transformation Systems for Analyzing Safety-Critical Systems --Incremental Transformation of Lattices: A Key to Effective Knowledge Discovery -- GraCAD - Graph-Based Tool for Conceptual Design -- A Formal Semantics of UML State charts by Model Transition Systems --Hierarchical Vertex Ordering -- Tutorials and Workshops -- Tutorial Introduction to Graph Transformation: A Software Engineering Perspective -- Tutorial on DNA Computing and Graph Transformation -Computational Nature of Gene Assembly in Ciliates -- TERMGRAPH 2002 Workshop Survey -- Workshop on Graph-Based Tools --Workshop on Graph Transformation and Visual Modeling Techniques --Workshop on Software Evolution through Transformations: Towards Uniform Support throughout the Software Life-Cycle -- Workshop on Logic, Graph Transformations and Discrete Structures.

Sommario/riassunto

ICGT 2002 was the first International Conference on Graph Transformation following a series of six international workshops on graph grammars with - plications in computer science, held in Bad Honnef (1978), Osnabruc "k (1982), Warrenton (1986), Bremen (1990), Williamsburg (1994), and Paderborn (1998). ICGT 2002 was held in Barcelona (Spain), October 7–12, 2002 under the a-pieces of the European Association of Theoretical Computer Science (EATCS), the European Association of Software Science and Technology (EASST), and the IFIP Working Group 1.3, Foundations of Systems Specification. The scope of the conference concerned graphical structures of various kinds (like graphs, diagrams, visual sentences and others) that are useful to describe complex structures and systems in a direct and intuitive way. These structures are often augmented by formalisms which add to the static description a further dimension, allowing for the modeling of the evolution of systems via all kinds of transformations of such graphical structures. The field of Graph Transformation is concerned with the theory, applications, and implementation issues of such formalisms. The theory is strongly related to areas such as graph theory and graph algorithms, formal language and parsing theory, the theory of concurrent and distributed systems, formal specification and verification, logic, and semantics.