Preface

The area of graph transformation originated in the late 1960s under the name "graph grammars" – the main motivation came from practical considerations concerning pattern recognition and compiler construction. Since then, the list of areas which have interacted with the development of graph transformation has grown impressively. The areas include: software specification and development, VLSI layout schemes, database design, modeling of concurrent systems, massively parallel computer architectures, logic programming, computer animation, developmental biology, music composition, distributed systems, specification languages, software and web engineering, and visual languages.

As a matter of fact, graph transformation is now accepted as a fundamental computation paradigm where computation includes specification, programming, and implementation. Over the last three decades the area of graph transformation has developed at a steady pace into a theoretically attractive research field, important for applications.

This volume consists of papers selected from contributions to the Sixth International Workshop on Theory and Applications of Graph Transformation that took place in Paderborn, Germany, November 16-20, 1998. The papers underwent an additional refereeing process which yielded 33 papers presented here (out of 55 papers presented at the workshop). This collection of papers provides a very broad snapshot of the state of the art of the whole field today. They are grouped into nine sections representing most active research areas.

The workshop was the sixth in a series of international workshops which take place every four years. Previous workshops were called "Graph Grammars and Their Application to Computer Science". The new name of the Sixth Workshop reflects more accurately the current situation, where both theory and application play an equally central role.

The workshop has received financial support from the European Community as a TMR Euroconference, as well as through the TMR network GETGRATS and the ESPRIT Working Group APPLIGRAPH.

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Organization

TAGT'98 was organized by the Department of Mathematics and Computer Science of the University of Paderborn, Germany, at the Heinz Nixdorf Museums-Forum, Paderborn.

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