

Preface

This volume contains the proceedings of the Latin American Theoretical Informatics (LATIN) conference to be held in Cancun, Mexico, April 3–6, 2002.

The LATIN series of symposia was launched in 1992 to foster the interaction between the Latin-American community and computer scientists around the world. This is the fifth event in the series after São Paulo, Brazil (1992), Valparaíso, Chile (1995), Campinas, Brazil (1998), and Punta del Este, Uruguay (2000). The proceedings of these conferences were also published by Springer-Verlag in the Lecture Notes in Computer Science series: volumes 583, 911, 1380, and 1776, respectively. Also as before, we expect to publish a selection of the papers in a special issue of a prestigious journal.

We received 104 submissions (one of which was withdrawn), from about 220 different authors in 26 different countries. Each paper was assigned to at least 3 Program Committee members. The Program Committee selected 44 papers from 22 countries using the help of 106 external reviewers in an electronic meeting. This is a record number of submissions and the lowest acceptance rate, compared to 86 received, 42 accepted in 2000, 53 received, 28 accepted in 1998, 68 received, 38 accepted in 1995, and 66 received, 32 accepted in 1992. Also, the conference included 6 invited talks and 2 tutorials.

The assistance of several organizations and individuals was essential for the success of this meeting. Also essential were previous LATIN meetings, because of their role in developing computer science research in Latin-America, and their valuable organizational experience. Ricardo Baeza-Yates, Daniel Panario, and Alfredo Viola provided insightful advice and shared with us their experiences as organizers of previous LATIN meetings. The conference was possible thanks to the Conference Chair, Edgar Chávez. In addition to providing advice on academic matters, he was in charge of the conference web site, the electronic submission system, local arrangements, publicity, financial administration, and fund raising. Thanks to my host institution, the Cambridge Research Laboratory of Compaq for all the support, as well to the Instituto de Matemáticas, UNAM, from which I am on leave. Finally, we thank Springer-Verlag for publishing these proceedings in the LNCS series.

LATIN has established itself as a conference for theoretical computer science research in Latin-America of the highest academic standards. It has strengthened the ties between local and international scientific communities, and fostered research in Latin-America. We believe that this volume reflects these facts.

Invited Presentations

Tutorials

From Algorithms to Cryptography

Fabrizio Luccio and Linda Pagli

Università di Pisa, Italy

Algebraic Topology and Concurrency

Eric Goubault

Commissariat à l'énergie
atomique, France

Maurice Herlihy

Brown University, USA

Martin Raussen

Aalborg University, Denmark

Invited Talks

Phase Transitions in Computer Science

Jennifer Chayes

Microsoft Research, USA

The Internet, the Web, and Algorithms

Christos H. Papadimitriou

UC Berkeley, USA

Erdős Magic

Joel Spencer

Courant Institute, USA

Open Problems in Computational Geometry

Jorge Urrutia

Instituto de Matemáticas,
UNAM, México

Quantum Algorithms and Complexity

Umesh Vazirani

UC Berkeley, USA

Testing and Checking of Finite State Systems

Mihalis Yannakakis

Avaya Laboratories, USA

Organization

Conference Chair:	Edgar Chávez, Univ. Michoacana, México
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Referees

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Andris Ambainis	Venkat Guruswami	Ruy de Queiroz
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Hans Bodlaender	Joseph D. Horton	Ronny Roth
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Renato Carmo	Sam Kim	Kai Salomaa
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