Foreword

The papers contained in this volume were presented at the 11th Annual Symposium on Combinatorial Pattern Matching, held June 21-23, 2000 at the Université de Montréal. They were selected from 44 abstracts submitted in response to the call for papers. In addition, there were invited lectures by Andrei Broder (AltaVista), Fernando Pereira (AT&T Research Labs), and Ian H. Witten (University of Waikato).

The symposium was preceded by a two-day summer school set up to attract and train young researchers. The lecturers at the school were Greg Butler, Clement Lam, and Gus Grahne: *BLAST! How do you search sequence databases?*, David Bryant: *Phylogeny*, Raffaele Giancarlo: *Algorithmic aspects of speech recognition*, Nadia El-Mabrouk: *Genome rearrangement*, Laxmi Parida: *Flexiblepattern discovery*, and Ian H. Witten: *Adaptive text mining: inferring structure from sequences*.

Combinatorial Pattern Matching (CPM) addresses issues of searching and matching strings and more complicated patterns such as trees, regular expressions graphs, point sets, and arrays. The goal is to derive non-trivial combinatorial properties of such structures and to exploit these properties in order to achieve superior performance for the corresponding computational problems.

Over recent years a steady flow of high-quality research on this subject has changed a sparse set of isolated results into a fully-fledged area of algorithmics. This area is continuing to grow even further due to the increasing demand for speed and efficiency that comes from important and rapidly expanding applications such as the World Wide Web, computational biology, and multimedia systems, involving requirements for information retrieval, data compression, and pattern recognition. The objective of the annual CPM gatherings is to provide an international forum for research in combinatorial pattern matching and related applications.

The first ten meetings were held in Paris (1990), London (1991), Tucson (1992), Padova (1993), Asilomar (1994), Helsinki (1995), Laguna Beach (1996), Aahrus (1997), Piscataway (1998), and Warwick (1999). After the first meeting, a selection of papers appeared as a special issue of *Theoretical Computer Science* in Volume 92. The proceedings of the third to tenth meetings appeared as volumes 644, 684, 807, 937, 1075, 1264, 1448, and 1645 of the Springer LNCS series.

The general organization and orientation of CPM conferences is coordinated by a steering committee composed of:

Alberto Apostolico, University of Padova & Purdue University Maxime Crochemore, Université de Marne-la-Vallée

Zvi Galil, *Columbia University* Udi Manber, *Yahoo! Inc.* The program committee of CPM 2000 consisted of:

	o aa Banaa
Amihood Amir,	Universi
Bar Ilan University	& Polyte
Bonnie Berger,	Wojciech R
MIT	Universi
Byron Dom,	& Unive
IBM Almaden	Marie-France
Raffaele Giancarlo, Co-chair,	Institut 1
University of Palermo	Cenk Sahin
Dan Gusfield,	Case We
University of California, Davis	David Sank
Monika Henzinger,	Universi
Google, Inc.	Jim Storer,
John Kececioglu,	Brandeis
University of Georgia	Esko Ukkor
· · ·	

Gad Landau, University of Haifa & Polytechnic University Wojciech Rytter, University of Warsaw & University of Liverpool Marie-France Sagot, Institut Pasteur Cenk Sahinalp, Case Western Reserve University David Sankoff, Co-chair, Université de Montréal Jim Storer, Brandeis University Esko Ukkonen, University of Helsinki

The local organizing committee, all from the *Université de Montréal*, consisted of:

Nadia El-Mabrouk Louis Pelletier David Sankoff Sylvain Viart

The conference was supported by the **Centre de recherches mathématiques** of the *Université de Montréal*, in the context of a thematic year on Mathematical Methods in Biology and Medecine (2000-2001).

April 2000

Raffaele Giancarlo David Sankoff

List of Reviewers

- O. Arbel
- D. Brown
- D. Bryant
- C. Constantinescu
- C. Cormode
- K. Diks
- F. Ergun
- R. Fagin

- P. Ferragina
- R. Grossi
- R. Kumar
- A. Malinowski
- D. Modha
- M. Nykanen
- W. Plandowski
- A. Piccolboni
- R. Sprugnoli M. Sciortino D. Shapira J. Sharp L. Stockmeyer