

Preface

The symposia on Fundamentals of Computation Theory are held every two years. Following the tradition established at the first FCT 1977, the conference brings together specialists in theoretical fields of Computer Science from various countries and stimulates mathematical research in theoretical computer science. Topics of interest for the satellite workshop on *Efficient Algorithms* WEA 2001 are: computational complexity, graph and network algorithms, flow and routing algorithms, coloring and partitioning, cuts and connectivity, packing and covering, scheduling algorithms, approximation algorithms, inapproximability results, on-line problems, randomized algorithms, integer programming, semidefinite programming, algorithmic geometry, polyhedral combinatorics, branch and bound algorithms, cutting plane algorithms, and various applications.

The 13th FCT was held in Riga-Lielupe, August 22-24, 2001 with an additional day (August 25) for the satellite workshop WEA 2001. The previous meetings were held in the following cities:

- Poznan-Kórnik, Poland, 1977
- Wendish-Rietz, Germany, 1979
- Szeged, Hungary, 1981
- Borgholm, Sweden, 1983
- Cottbus, Germany, 1985
- Kazan, Russia, 1987
- Szeged, Hungary, 1989
- Gosen-Berlin, Germany, 1991
- Szeged, Hungary, 1993
- Dresden, Germany, 1995
- Kraków, Poland, 1997
- Iasi, Romania, 1999

This year the number of submitted papers was high. The Program Committee decided to accept 28 submissions as regular papers and 15 submissions as short papers. Additionally, the Program Committee of WEA 2001 accepted 8 papers. This volume contains all the contributed papers. The invited speakers were:

- Jānis Bārzdīņš (Riga, Latvia)
- Gilles Brassard (Montreal, Canada)
- Klaus Jansen (Kiel, Germany)
- Juhani Karhumäki (Turku, Finland)
- Marek Karpinski (Bonn, Germany)
- Boris Plotkin (Jerusalem, Israel)
- Umesh Vazirani (Berkeley, USA)

The invited speakers for WEA 2001 were:

- Foto Afrati (Athens, Greece)
- Andreas Brandstädt (Rostock, Germany)
- Luisa Gargano (Salerno, Italy)
- Stephane Perennes (Sophia-Antipolis, France)

All papers published in the workshop proceedings were selected by the program committee on the basis of referee reports. Each paper was reviewed by at least three referees who judged the papers for originality, quality, and consistency with the topics of the conference. The Program Committee consisted of:

- Andris Ambainis (Berkeley, USA)
- Setsuo Arikawa (Fukuoka, Japan)
- Yuri Breitbart (Bell Labs, USA)
- Cristian Calude (Auckland, New Zealand)
- Bogdan Chlebus (Warsaw, Poland)
- Alexander Dikovskiy (Nantes, France)
- Rūsiņš Freivalds (Riga, Latvia), Chair
- Jozef Gruska (Brno, Czech Republic)
- Tero Harju (Turku, Finland)
- Kazuo Iwama (Kyoto, Japan)
- Aleksander Letichevskij (Kiev, Ukraine)
- Andrzej Lingas (Lund, Sweden)
- Christoph Meinel (Trier, Germany)
- Valery Nepomniaschy (Novosibirsk, Russia)
- Jaan Penjam (Tallinn, Estonia)
- Anatol Slissenko (Paris, France)
- Carl Smith (Maryland, USA)
- Esko Ukkonen (Helsinki, Finland)
- Eli Upfal (Brown, USA)
- Mars Valiev (Moscow, Russia)

The Program Committee of the Workshop on *Efficient Algorithms* **WEA 2001** worked in close touch with the Program Committee of *FCT 2001* but made their decisions separately. This Program Committee consisted of:

- Yossi Azar (Tel-Aviv, Israel)
- Evripidis Bampis (Evry, France), Co-chair
- Michael Bender (Stony Brook, USA)
- Thomas Erlebach (Zurich, Switzerland)
- Wenceslas Fernandez De La Vega (Orsay, France)
- Wen-Lian Hsu (Academia Sinica, Taiwan)
- Klaus Jansen (Kiel, Germany), Co-chair
- Elias Koutsoupias (Athens, Greece and Los Angeles, USA)
- Jan Kratochvil (Prague, Czech Republic)
- Seffi Naor (Haifa, Israel)
- Takao Nishizeki (Tohoku, Japan)

- Ingo Schiermeyer (Freiberg, Germany)
- Sergey Sevastianov (Novosibirsk, Russia)
- Martin Skutella (Berlin, Germany)

We would like to thank all the authors who responded to the call for papers, our invited speakers, and the referees.

Furthermore, we thank the members of the Organizing Committee:

- Baiba Apine
- Juris Borzovs, Chair
- Māra Cepīte
- Ārija Deme
- Mārtiņš Dīcis
- Andrejs Dubrovskis
- Rudīte Ekmane
- Anita Ermuša
- Rūsiņš Freivalds
- Marats Golovkins
- Filips Jelisejevs
- Anita Kalniņa
- Maksims Kravcevs
- Ieva Lapiņa
- Ināra Opmane
- Raitis Ozols
- Jānis Plūme
- Juris Smotrovs
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- Oksana Ščeguļnaja
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 Evripidis Bampis
 Klaus Jansen