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**ICTCS'14**

**Fifteenth Italian Conference on  
Theoretical Computer Science**

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Proceedings**

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## Preface

This volume contains the papers presented at ICTCS 2014, the 15th Italian Conference on Theoretical Computer Science held on September 17-19, 2014 in Perugia.

ICTCS is the traditional meeting of the Italian Chapter of the European Association for Theoretical Computer Science (EATCS). The purpose of these meetings is fostering the cross-fertilisation of ideas stemming from different areas of theoretical computer science. Hence, they represent occasions for exchanging ideas and for sharing experiences between researchers. They also provide the ideal environment where junior researchers and PhD students can meet senior researchers.

The Italian Chapter of the EATCS was founded in 1972 and previous meetings took place in Pisa (1972), Mantova (1974 and 1989), L'Aquila (1992), Ravello (1995), Prato (1998), Torino (2001), Bertinoro (2003), Pontignano (2005), Roma (2007), Cremona (2009), Camerino (2010), Varese (2012) and Palermo (2013). As usual, ICTCS 2014 was open to researchers from outside Italy, who are always welcome to submit papers and attend these periodical events.

In this edition, there were 30 submitted contributions. Each of them was reviewed by at least 3 Program Committee members. The Committee decided to accept 26 papers covering several areas of theoretical computer science. The participants came from institutions of various countries, namely, China, Finland, France, India, Israel, Italy, Japan, Poland, Tunisia, Turkey, UK, and USA. The program included two invited speakers, Rocco De Nicola (IMT, Lucca) and Giuseppe Liotta (Università di Perugia) and a presentation given by Flavio Chierichetti (Sapienza Università di Roma), the recipient of the *Young Researcher in Theoretical Computer Science Award 2014*, conferred this year by the Italian Chapter. Furthermore, Livio Bioglio (INSERM, Paris) and Andrea Marino (Università di Milano), the two recipients of the *Best PhD Thesis in Theoretical Computer Science Award 2014*, assigned by the Italian Chapter, gave two talks illustrating their recent research. The program of ICTCS 2014 included a special session devoted to the memory of Alberto Bertoni, which was one of the founders of the Italian Chapter and recently passed away. This session, was organized by Arturo Carpi and Alessandra Cherubini.

We would like to express our gratitude to the invited speakers, to the recipients of the three Awards, and to all authors and participants. We also wish to thank the members of the Program Committee and all additional anonymous reviewers for their hard work. A special mention is due to the colleagues of the Organizing Committee for the invaluable contribution they gave in organizing ICTCS 2014.

We would like to give special thanks to the various sponsors that supported the event: EATCS, Università di Perugia, Dipartimento di Matematica e Informatica, Regione Umbria, Provincia di Perugia, Comune di Perugia, Fondazione Perugiassisi 2019, Fondazione Cassa di Risparmio di Perugia, INdAM-GNCS, IOS Press. Finally, we mention Easy-Chair and CEUR-WS.org that helped us in organizing the conference and producing the proceedings.

September 2014  
Perugia

Stefano Bistarelli  
Andrea Formisano

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## Contents

### Invited Talks

- A formal approach to autonomic systems programming: the SCEL language**  
*Rocco De Nicola* 1
- Graph drawing beyond planarity: some results and open problems**  
*Giuseppe Liotta* 3

### ICTCS Young TCS Research Award

- Trace complexity**  
*Flavio Chierichetti* 9

### ICTCS Doctoral Research Awards

- Type disciplines for systems biology**  
*Livio Bioglio* 11
- Algorithms for biological graphs: analysis and enumeration**  
*Andrea Marino* 15

### Regular Papers

- Timed process calculi: from durationless actions to durational ones**  
*Marco Bernardo, Flavio Corradini, Luca Tesei* 21
- Size-constrained 2-clustering in the plane with Manhattan distance**  
*Alberto Bertoni, Massimiliano Goldwurm, Jianyi Lin, Linda Pini* 33
- Graphs of edge-intersecting and non-splitting paths**  
*Arman Boyacı, Tinaz Ekim, Mordechai Shalom, Shmuel Zaks* 45
- A graph-easy class of mute lambda-terms**  
*Antonio Bucciarelli, Alberto Carraro, Giordano Favro, Antonino Salibra* 59

## CONTENTS

---

<b>Relating threshold tolerance graphs to other graph classes</b> <i>Tiziana Calamoneri, Blerina Sinimeri</i>	<b>73</b>
<b>Černý-like problems for finite sets of words</b> <i>Arturo Carpi, Flavio D’Alessandro</i>	<b>81</b>
<b>Reasoning about connectivity without paths</b> <i>Alberto Casagrande, Eugenio Omodeo</i>	<b>93</b>
<b>Binary 3-compressible automata</b> <i>Alessandra Cherubini, Andrzej Kisielewicz</i>	<b>109</b>
<b>Extendibility of Choquet rational preferences on generalized lotteries</b> <i>Giulianella Coletti, Davide Petturiti, Barbara Vantaggi</i>	<b>121</b>
<b>On multiple learning schemata in conflict driven solvers</b> <i>Andrea Formisano, Flavio Vella</i>	<b>133</b>
<b>A metamodeling level transformation from UML sequence diagrams to Coq</b> <i>Chao Li, Liang Dou, Zongyuan Yang</i>	<b>147</b>
<b>An efficient algorithm for generating symmetric ice piles</b> <i>Roberto Mantaci, Paolo Massazza, Jean-Baptiste Yunès</i>	<b>159</b>
<b>Adding two equivalence relations to the interval temporal logic AB</b> <i>Angelo Montanari, Marco Pazzaglia, Pietro Sala</i>	<b>171</b>
<b>Efficient channel assignment for cellular networks modeled as honeycomb grid</b> <i>Soumen Nandi, Nitish Panigrahy, Mohit Agrawal, Sasthi C. Ghosh, Sandip Das</i>	<b>183</b>
<b>Programmable enforcement framework of information flow policies</b> <i>Minh Ngo, Fabio Massacci</i>	<b>197</b>
<b>On the Stackelberg fuel pricing problem</b> <i>Cosimo Vinci, Vittorio Bilò</i>	<b>213</b>
<b>Structural complexity of multi-valued partial functions computed by nondeterministic pushdown automata</b> <i>Tomoyuki Yamakami</i>	<b>225</b>

**Communications**

<b>Proving termination of programs having transition invariants of height <math>\omega</math></b> <i>Stefano Berardi, Paulo Oliva, Silvia Steila</i>	<b>237</b>
<b>Orthomodular algebraic lattices related to combinatorial posets</b> <i>Luca Bernardinello, Lucia Pomello, Stefania Rombolà</i>	<b>241</b>
<b>Abstract argumentation frameworks to promote fairness and rationality in multi-experts multi-criteria decision making</b> <i>Stefano Bistarelli, Martine Ceberio, Joel A. Henderson, Francesco Santini</i>	<b>247</b>
<b>Optimal placement of storage nodes in a wireless sensor network</b> <i>Gianlorenzo D'Angelo, Daniele Diodati, Alfredo Navarra, Cristina M. Pinotti</i>	<b>259</b>
<b>Engineering shortest-path algorithms for dynamic networks</b> <i>Mattia D'Emidio, Daniele Frigioni</i>	<b>265</b>
<b>Minimal models for rational closure in <i>SHIQ</i></b> <i>Laura Giordano, Valentina Gliozzi, Nicola Olivetti, Gian Luca Pozzato</i>	<b>271</b>
<b>An algebraic characterization of unary two-way transducers</b> <i>Christian Choffrut, Bruno Guillon</i>	<b>279</b>
<b>Logspace computability and regressive machines</b> <i>Stefano Mazzanti</i>	<b>285</b>

**Papers not included here and published elsewhere**

<b>Operational state complexity under Parikh equivalence</b> <i>Giovanna Lavado, Giovanni Pighizzini and Shinnosuke Seki. Appeared in H. Jur- gensen et al. (Eds.): DCFS 2014, LNCS 8614, pp. 294-305. Springer (2014)</i>	<b>291</b>
---	------------

**Author Index**

**291**