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# Structural Information and Communication Complexity

11th International Colloquium, SIROCCO 2004  
Smolenice Castle, Slovakia, June 21-23, 2004  
Proceedings



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# Preface

The Colloquium on Structural Information and Communication Complexity (SIROCCO) is an annual meeting focused on the relationship between computing and communication. Over its 11 years of existence, SIROCCO has gained a considerable respect and has become an acknowledged forum bringing together specialists interested in the fundamental principles underlying all computing through communication.

SIROCCO 2004 was the 11th in this series, held in Smolenice Castle, June 21–23, 2004. Previous SIROCCO colloquia took place in Ottawa (1994), Olympia (1995), Siena (1996), Ascona (1997), Amalfi (1998), Lacanau-Océan (1999), L’Aquila (2000), Val de Nuria (2001), Andros (2002), and Umeå (2003). The colloquium in 2004 was special in the respect that, for the first time, the proceedings were published in the Lecture Notes in Computer Science series of Springer–Verlag.

SIROCCO has always encouraged high-quality research focused on the study of those factors which are significant for the computability and the communication complexity of problems, and on the interplay between structure, knowledge, and complexity. It covers topics as distributed computing, mobile computing, optical computing, parallel computing, communication complexity, information dissemination, routing protocols, distributed data-structures, models of communication, network topologies, high-speed interconnection networks, wireless networks, sense of direction, structural properties, and topological awareness. The 56 contributions submitted to this year’s SIROCCO were subject to a thorough refereeing process and 26 high quality submissions were selected for publication. We thank the Program Committee members for their profound and careful work. Our gratitude extends to the numerous subreferees for their valuable refereeing. We also acknowledge the effort of all authors who submitted their contributions.

We thank the invited speakers at this colloquium, Paul Spirakis (Patras) and Shmuel Zaks (Haifa) for accepting our invitation to share their insights on new developments in their areas of interest. Paul Spirakis delivered a talk about “*Algorithmic aspects in congestion games*” and Shmuel Zaks presented “*Results and research directions in ATM and optical networks*”.

We would like to express our sincere gratitude to the conference chair David Peleg (Rehovot) for his enthusiasm and invaluable consultations, and to the organizing team chaired by Dana Pardubská and Imrich Vrto.

Our deepest respect belongs to our late friend and colleague Peter Ružička who started the preparation of SIROCCO 2004.



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