

## Preface

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The papers of this volume were among the best papers presented at the 1st International Symposium on Algorithmic Game Theory (SAGT 2008) held on April 30th to May 2nd, 2008, in Paderborn, Germany.

Five of these papers were subsequently invited to the TOCS journal. They were then refereed according to the usual TOCS standards and accepted for this Special Issue of TOCS devoted to SAGT 2008.

The purpose of SAGT 2008 was to bring together researchers from Computer Science, Economics and Mathematics to present and discuss original research at the intersection of Algorithms and Game Theory. Consequently, it was intended to cover all important areas of Algorithmic Game Theory, such as: Solution Concepts in Game Theory; Game Classes; Exact and Approximate Computation of Equilibria; Convergence and Learning in Games; Complexity Classes in Game Theory; Algorithmic Aspects of Fixed-Point Theorems; Mechanisms, Incentives and Coalitions; Cost-Sharing Algorithms and Analysis; Computational Aspects of Market Equilibria; Computational Problems in Economics, Finance, Decision Theory and Pricing; Auction Algorithms and Analysis; Price of Anarchy and its Relatives; Representations of Games and their Complexity; Economic Aspects of Distributed Computing and the Internet; Network Formation on the Internet; Congestion, Routing and Network Design Games; Game-Theoretic Approaches to Networking Problems; Byzantine Game Theory.

The main focus of the papers published in this special issue is on questions regarding Network Congestion Games, the Price of Anarchy and Cost-Sharing Algorithms and Analysis.

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We would like to thank all the authors that responded to our invitation and went through a quite severe refereeing process. We also would like to thank all the reviewers for their careful work that has certainly achieved its purpose to help the authors to revise their papers so that they are as complete as possible.