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Preface

This volume contains the papers presented at the First International Symposium on Algorithmic Game Theory (SAGT 2008) held from April 30 to May 2 in Paderborn, Germany.

The purpose of SAGT is to bring together researchers from computer science, economics and mathematics to present and discuss original research at the intersection of algorithms and game theory. It is intended to cover all important areas of algorithmic game theory, such as: solution concepts in game theory; game classes (e.g., bimatrix, potential, Bayesian); 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.

There were 60 submissions. Each submission was reviewed by three Programme Committee members. The committee decided to accept 28 papers. The programme also included three invited talks from outstanding researchers Christos Papadimitriou, Nobel Memorial Prize winner Reinhard Selten and Paul Spirakis.

We would like to thank all the Programme Committee members and the external reviewers who assisted them in their work.

The members of the Organizing Committee as well as the developer of the EasyChair conference system deserve our gratitude for their contributions throughout the preparations.

We gratefully acknowledge support from the European Association for Theoretical Computer Science (EATCS), Integrated Project AEOLUS (IST-015964) of the European Union, University of Paderborn, and the City of Paderborn.

February 2008

Burkhard Monien
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