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Complexity of Constraints

An Overview of Current Research Themes

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Preface

In October 2006, the editors of this volume organized a Dagstuhl Seminar on “Complexity of Constraints” at the Schloss Dagstuhl Leibniz Center for Informatics in Wadern, Germany. This event consisted of both invited and contributed talks by some of the approximately 40 participants, as well as problem sessions and informal discussions. After the conclusion of the seminar, the organizers invited a number of speakers to write surveys presenting the state-of-the-art knowledge in their area of expertise. These contributions were peer-reviewed by experts in the field and revised before they were included in this volume. In addition, this volume contains a reprint of a survey by P.G. Kolaitis and M.Y. Vardi on the logical approach to constraint satisfaction that first appeared in “Finite Model Theory and Its Applications,” (Springer 2007).

We thank the Directorate of Schloss Dagstuhl for its support, the speakers of the seminar for making it a successful event, and, above all, the contributors to this volume for their informative and well-written surveys. We also thank Arne Meier for technical assistance during the final compilation of this book, and Alfred Hofmann at Springer for his support and guidance.

July 1 (the birthday of Gottfried Wilhelm Leibniz) 2008

Nadia Creignou
Phokion G. Kolaitis
Heribert Vollmer

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