# Lecture Notes in Computer Science

Edited by G. Goos, J. Hartmanis and J. van Leeuwen

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# Randomization and Approximation Techniques in Computer Science

Second International Workshop, RANDOM'98 Barcelona, Spain, October 8-10, 1998 Proceedings



Series Editors

Gerhard Goos, Karlsruhe University, Germany Juris Hartmanis, Cornell University, NY, USA Jan van Leeuwen, Utrecht University, The Netherlands

Volume Editors

Michael Luby International Computer Science Institute 1947 Center Street, Suite 600, Berkeley, CA 94704-1198, USA E-mail: luby@icsi.berkeley.edu

José D.P. Rolim University of Geneva, Computer Science Department 24, rue Général Dufour, CH-1211 Geneva 4, Switzerland E-mail: rolim@cui.unige.ch

Maria Serna University of Barcelona (UPC) Jordi Girona Salgado 1-3, E-08034 Barcelona, Spain E-mail: mjserna@lsi.upc.es

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## Foreword

The Workshop on *Randomization and Approximation Techniques in Computer Science*, **Random'98**, focuses on algorithmic and complexity aspects arising in the development of efficient randomized solutions to computationally difficult problems. It aims, in particular, at fostering the cooperation among practitioners and theoreticians and among algorithmic and complexity researchers in the field. RANDOM'98, held at the University of Barcelona (UPC), October 8–10, 1998, is the second in the series, after Bologna.

This volume contains all contributed papers accepted for presentation at the workshop, together with invited lectures by Josep Díaz (UPC Barcelona), Alan M. Frieze (Carnegie Mellon U.), Michael Luby (ICSI Berkeley), and Emo Welzl (ETH Zürich). The contributed papers were selected out of several dozen submissions received in response to the call for papers. All papers published in the workshop proceedings were selected by the program committee on the basis of referee reports. Considerable effort was devoted to the evaluation of the submissions by the program committee and a number of other referees. Extensive feedback was provided to authors as a result, which we hope has proven helpful to them.

We would like to thank all of the authors who responded to the call for papers, our invited speakers, the referees, and the members of the program committee:

Michael Luby, Chair, ICSI Berkeley Andrei Broder, Digital Systems Research Center Bernard Chazelle, Princeton U. Andrea Clementi, U. of Rome Anna Karlin, U. of Washington Richard Karp, U. of Washington Claire Kenyon, U. of Paris Sud Michael Mitzenmacher, Digital Systems Research Center Rajeev Motwani, Stanford U. Prabhakar Raghavan, IBM Maria Serna, UPC Barcelona Alistair Sinclair, U. of California, Berkeley Madhu Sudan, MIT Avi Wigderson, Hebrew U. Peter Winkler, Bell Labs

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August 1998

Michael Luby, José D. P. Rolim, Maria J. Serna

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