

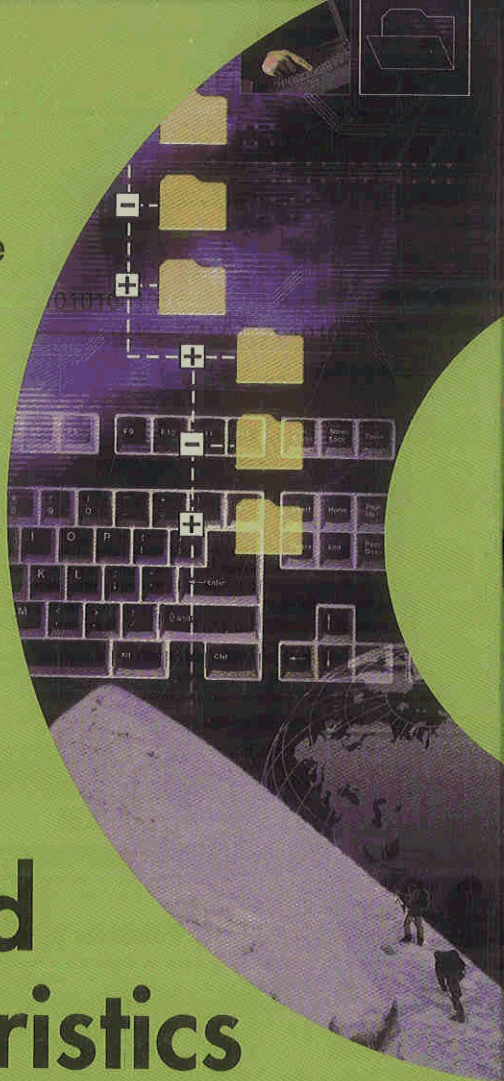
Series on **Vol. 1**
Theoretical Computer Science

Theory of Randomized Search Heuristics

Foundations and Recent Developments

Anne Auger • Benjamin Doerr
Editors

 World Scientific



Contents

<i>Preface</i>	vii
1. Analyzing Randomized Search Heuristics: Tools from Probability Theory <i>Benjamin Doerr</i>	1
2. Runtime Analysis of Evolutionary Algorithms for Discrete Optimization <i>Peter S. Oliveto and Xin Yao</i>	21
3. Evolutionary Computation in Combinatorial Optimization <i>Daniel Johannsen</i>	53
4. Theoretical Aspects of Evolutionary Multiobjective Optimization <i>Dimo Brockhoff</i>	101
5. Memetic Evolutionary Algorithms <i>Dirk Sudholt</i>	141
6. Simulated Annealing <i>Thomas Jansen</i>	171

7. Theory of Particle Swarm Optimization	197
<i>Carsten Witt</i>	
8. Ant Colony Optimization: Recent Developments in Theoretical Analysis	225
<i>Walter J. Gutjahr</i>	
9. A “No Free Lunch” Tutorial: Sharpened and Focused No Free Lunch	255
<i>Darrell Whitley and Jonathan Rowe</i>	
10. Theory of Evolution Strategies: A New Perspective	289
<i>Anne Auger and Nikolaus Hansen</i>	
11. Lower Bounds for Evolution Strategies	327
<i>Olivier Teytaud</i>	
<i>Subject Index</i>	355