Table of Contents

Lower Bounds in Distributed Computing 1
F. Fich and E. Ruppert

Adaptive Mutual Exclusion with Local Spinning 29
J.H. Anderson and Y-J. Kim

Bounds for Mutual Exclusion with only Processor Consistency 44
L. Higham and J. Kawash

Even Better DCAS-Based Concurrent Deques 59
D.L. Detlefs, C.H. Flood, A.T. Garthwaite, P.A. Martin, N.N. Shavit, and G.L. Steele Jr.

Distributed Algorithms for English Auctions 74
Y. Atzmony and D. Peleg

A Probabilistically Correct Leader Election Protocol for Large Groups 89
I. Gupta, R. van Renesse and K.P. Birman

Approximation Algorithms for Survivable Optical Networks 104
T. Eilam, S. Moran and S. Zaks

Distributed Cooperation During the Absence of Communication 119
G.G. Malewicz, A. Russell and A.A. Shvartsman

On the Importance of Having an Identity or is Consensus Really Universal? 134
H. Buhrman, A. Panconesi, R. Silvestri, and P. Vitanyi

Polynomial and Adaptive Long-Lived $(2k-1)$-Renaming 149
H. Attiya and A. Fouren

Computing with Infinitely Many Processes 164
M. Merritt and G. Taubenfeld

Establishing Business Rules for Inter-Enterprise Electronic Commerce 179
V. Ungureanu and N.H. Minsky

Metering Schemes with Pricing 194
C. Blundo, A. De Bonis and B. Masucci

Exploitation of Ljapunov Theory for Verifying Self-Stabilizing Algorithms . 209
O. Theel

Self-Stabilizing Local Mutual Exclusion and Daemon Refinement 223
J. Beauquier, A.K. Datta, M. Gradinariu and F. Magniette

More Lower Bounds for Weak Sense of Direction: The Case of Regular Graphs 238
P. Boldi and S. Vigna

Gossip versus Deterministically Constrained Flooding on Small Networks . 253
M.-J. Lin, K. Marzullo, and S. Masini

Thrifty Generic Broadcast 268
M.K. Aguilera, C. Delporte-Gallet, H. Fauconnier, and S. Toueg

Locating Information with Uncertainty in Fully Interconnected Networks . . 283
L.M. Kirousis, E. Kranakis, D. Krizanc, and Y.C. Stamatiou

Optimistic Replication for Internet Data Services 297
Y. Saito and H.M. Levy

Scalable Replication in Database Clusters 315
M. Patiño-Martínez, R. Jiménez-Peris, B. Kemme, and G. Alonso

Disk Paxos 330
E. Gafni and L. Lamport

Objects Shared by Byzantine Processes 345
D. Malkhi, M. Merritt, M. Reiter, and G. Taubenfeld

Short Headers Suffice for Communication in a DAG with Link Failures . . . 360
F.E. Fich and A. Jakoby

Consistency Conditions for a CORBA Caching Service 374
G. Chockler, R. Friedman, and R. Vitenberg

Author Index **389**