

# Contents

## Part 1

### Survey papers

Queueing-theoretic solution methods for models of parallel and distributed systems	
<i>O.J. Bozma, G.M. Koole &amp; Z. Liu</i>	1
Annotated bibliography on stochastic Petri nets	
<i>F. Baccelli, G. Balbo, R.J. Boucherie, J. Campos &amp; G. Chiola</i>	25

### Queueing models

Applying spectral expansions in evaluating the performance of multiprocessor systems	
<i>M. Ettl &amp; I. Mitrani</i>	45
The compensation approach applied to a 2x2 switch	
<i>O.J. Bozma &amp; G.J. van Houtum</i>	59
Routing with breakdowns	
<i>I. Mitrani &amp; P.E. Wright</i>	81
G-networks with multiple class negative and positive customers	
<i>J.-M. Fourneau, E. Gelenbe &amp; R. Suros</i>	95
Response time distributions in tandem G-networks	
<i>P.G. Harrison &amp; E. Pitel</i>	113
On the power series algorithm	
<i>G.M. Koole</i>	139

## Part 2

### Petri net models

A structural characterisation of product form stochastic Petri nets	
<i>R.J. Boucherie &amp; M. Sereno</i>	157
Computational Algorithms for Product Form Solution Stochastic Petri Nets	
<i>M. Sereno &amp; G. Balbo</i>	175
Operational analysis of timed Petri nets and application to the computation of performance bounds	
<i>G. Chiola, C. Anglano, J. Campos, J.M. Colom &amp; M. Silva</i>	197
Computing bounds for the performance indices of quasi-lumpable stochastic well-formed nets	
<i>G. Franceschinis &amp; R.R. Muntz</i>	215
Functional and performance analysis of cooperating sequential processes	
<i>J. Campos, J.M. Colom, M. Silva &amp; E. Teruel</i>	233
Stationary regime and stability of free-choice Petri nets	
<i>F. Baccelli &amp; B. Gaujal</i>	253

A general iterative technique for approximate throughput computation of stochastic marked graphs	265
<i>J. Campos, J.M. Colom, H. Jungnitz &amp; M. Silva</i>	
Marking optimization and parallelism of marked graphs	285
<i>M. Canales &amp; B. Gaujal</i>	
<b>The (Max,+) algebra</b>	
Analytical computation of Lyapunov exponents in stochastic event graphs	309
<i>A. Jean-Marie</i>	
A graphical representation for matrices in the (Max,+) algebra	343
<i>J. Mairesse</i>	