

1. Record Nr.	UNINA9910554883003321
Titolo	Queueing theory 1 : advanced trends / / edited by Vladimir Anisimov, Nikolaos Limnios
Pubbl/distr/stampa	London, England ; ; Hoboken, New Jersey : , : ISTE Ltd. : , : John Wiley & Sons, Incorporated, , [2020] ©2020
ISBN	1-119-75542-5 1-119-75541-7
Descrizione fisica	1 online resource (335 pages) : illustrations
Disciplina	519.82
Soggetti	Queueing theory Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover -- Half-Title Page -- Title Page -- Copyright Page -- Contents -- Preface -- 1 Discrete Time Single-server Queues with Interdependent Interarrival and Service Times -- 1.1. Introduction -- 1.2. The Geo/Geo/1 case -- 1.2.1. Arrival probability as a function of service completion probability -- 1.2.2. Service times dependent on interarrival times -- 1.3. The PH/PH/1 case -- 1.3.1. A review of discrete PH distribution -- 1.3.2. The PH/PH/1 system -- 1.4. The model with multiple interarrival time distributions -- 1.4.1. Preliminaries -- 1.4.2. A queueing model with interarrival times dependent on service times -- 1.5. Interdependent interarrival and service times -- 1.5.1. A discrete time queueing model with bivariate geometric distribution -- 1.5.2. Matrix equivalent model -- 1.6. Conclusion -- 1.7. Acknowledgements -- 1.8. References -- 2 Busy Period, Congestion Analysis and Loss Probability in Fluid Queues -- 2.1. Introduction -- 2.2. Modeling a link under congestion and buffer fluctuations -- 2.2.1. Model description -- 2.2.2. Peaks and valleys -- 2.2.3. Minimum valley height in a busy period -- 2.2.4. Maximum peak level in a busy period -- 2.2.5. Maximum peak under a fixed fluid level -- 2.3. Fluid queue with finite buffer -- 2.3.1. Congestion metrics -- 2.3.2. Minimum valley height in a busy period -- 2.3.3. Reduction of

the state space -- 2.3.4. Distributions of $t_1(x)$ and $V_1(x)$ -- 2.3.5. Sequences of idle and busy periods -- 2.3.6. Joint distributions of loss periods and loss volumes -- 2.3.7. Total duration of losses and volume of information lost -- 2.4. Conclusion -- 2.5. References -- 3 Diffusion Approximation of Queueing Systems and Networks -- 3.1. Introduction -- 3.2. Markov queueing processes -- 3.3. Average and diffusion approximation -- 3.3.1. Average scheme -- 3.3.2. Diffusion approximation scheme. 3.3.3. Stationary distribution -- 3.4. Markov queueing systems -- 3.4.1. Collective limit theorem in R_1 -- 3.4.2. Systems of M/M type -- 3.4.3. Repairman problem -- 3.5. Markov queueing networks -- 3.5.1. Collective limit theorems in R_N -- 3.5.2. Markov queueing networks -- 3.5.3. Superposition of Markov processes -- 3.6. Semi-Markov queueing systems -- 3.7. Acknowledgements -- 3.8. References -- 4 First-come First-served Retrial Queueing System by Laszlo Lakatos and its Modifications -- 4.1. Introduction -- 4.2. A contribution by Laszlo Lakatos and his disciples -- 4.3. A contribution by E.V. Koba -- 4.4. An Erlangian and hyper-Erlangian approximation for a Laszlo Lakatos-type queueing system -- 4.5. Two models with a combined queueing discipline -- 4.6. References -- 5 Parameter Mixing in Infinite-server Queues -- 5.1. Introduction -- 5.2. The M./Coxn/8 queue -- 5.2.1. The differential equation -- 5.2.2. Calculating moments -- 5.2.3. Steady state -- 5.2.4. M./M/8 -- 5.3. Mixing in Markov-modulated infinite-server queues -- 5.3.1. The differential equation -- 5.3.2. Calculating moments -- 5.4. Discussion and future work -- 5.5. References -- 6 Application of Fast Simulation Methods of Queueing Theory for Solving Some High-dimension Combinatorial Problems -- 6.1. Introduction -- 6.2. Upper and lower bounds for the number of some k-dimensional subspaces of a given weight over a finite field -- 6.2.1. A general fast simulation algorithm -- 6.2.2. An auxiliary algorithm -- 6.2.3. Exact analytical formulae for the cases $k = 1$ and $k = 2$ -- 6.2.4. The upper and lower bounds for the probability $P\{Y.(r)\}$ -- 6.2.5. Numerical results -- 6.3. Evaluation of the number of "good" permutations by fast simulation on the SCIT-4 multiprocessor computer complex -- 6.3.1. Modified fast simulation method -- 6.3.2. Numerical results -- 6.4. References. 7 Diffusion and Gaussian Limits for Multichannel Queueing Networks -- 7.1. Introduction -- 7.2. Model description and notation -- 7.3. Local approach to prove limit theorems -- 7.3.1. Network of the $[GI|M|8]_r$ -type in heavy traffic -- 7.4. Limit theorems for networks with controlled input flow -- 7.4.1. Diffusion approximation of $[SM|M|8]_r$ -networks -- 7.4.2. Asymptotics of stationary distribution for $[SM|GI|8]_r$ -networks -- 7.4.3. Convergence to Ornstein-Uhlenbeck process -- 7.5. Gaussian approximation of networks with input flow of general structure -- 7.5.1. Gaussian approximation of $[G|M|8]_r$ -networks -- 7.5.2. Criterion of Markovian behavior for r-dimensional Gaussian processes -- 7.5.3. Non-Markov Gaussian approximation of $[G|GI|8]_r$ -networks -- 7.6. Limit processes for network with time-dependent input flow -- 7.6.1. Gaussian approximation of $Mt|M|_r$ -networks in heavy traffic -- 7.6.2. Limit process in case of asymptotically large initial load -- 7.7. Conclusion -- 7.8. Acknowledgements -- 7.9. References -- 8 Recent Results in Finite-source Retrial Queues with Collisions -- 8.1. Introduction -- 8.2. Model description and notations -- 8.3. Systems with a reliable server -- 8.3.1. M/M/1 systems -- 8.3.2. M/GI/1 system -- 8.4. Systems with an unreliable server -- 8.4.1. M/M/1 system -- 8.4.2. M/GI/1 system -- 8.4.3. Stochastic simulation of special systems -- 8.4.4. Gamma distributed retrial times -- 8.4.5. The effect of breakdowns disciplines -- 8.5. Conclusion -- 8.6. Acknowledgments

-- 8.7. References -- 9 Strong Stability of Queueing Systems and Networks: a Survey and Perspectives -- 9.1. Introduction -- 9.2. Preliminary and notations -- 9.3. Strong stability of queueing systems -- 9.3.1. M/M/1 queue -- 9.3.2. PH/M/1 and M/PH/1 queues -- 9.3.3. G/M/1 and M/G/1 queues -- 9.3.4. Other queues -- 9.3.5. Queueing networks. 9.3.6. Non-parametric perturbation -- 9.4. Conclusion and further directions -- 9.5. References -- 10 Time-varying Queues: a Two-time-scale Approach -- 10.1. Introduction -- 10.2. Time-varying queues -- 10.3. Main results -- 10.3.1. Large deviations of two-time-scale queues -- 10.3.2. Computation of $H(y, t)$ -- 10.3.3. Applications to queueing systems -- 10.4. Concluding remarks -- 10.5. References -- List of Authors -- Index -- EULA.

2. Record Nr.	UNINA9910778954803321
Autore	Lucas Gavin <1965->
Titolo	Understanding the archaeological record / / Gavin Lucas [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2012
ISBN	1-139-20977-9 1-107-22849-2 1-280-56882-8 1-139-22266-X 9786613598424 0-511-84577-4 1-139-22437-9 1-139-21786-0 1-139-21477-2 1-139-22094-2
Descrizione fisica	1 online resource (xiv, 306 pages) : digital, PDF file(s)
Classificazione	SOC003000
Disciplina	930.1
Soggetti	Archaeology - Philosophy Archaeology - Methodology History Ontology Antiquities Material culture Social archaeology

Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Machine generated contents note: 1. The trouble with theory; 2. The total record; 3. Formation theory; 4. Materialized culture; 5. Archaeological entities; 6. Archaeological interventions; 7. A 'new' social archaeology?
Sommario/riassunto	This book explores the diverse understandings of the archaeological record in both historical and contemporary perspective, while also serving as a guide to reassessing current views. Gavin Lucas argues that archaeological theory has become both too fragmented and disconnected from the particular nature of archaeological evidence. The book examines three ways of understanding the archaeological record - as historical sources, through formation theory and as material culture - then reveals ways to connect these three domains through a reconsideration of archaeological entities and archaeological practice. Ultimately, Lucas calls for a rethinking of the nature of the archaeological record and the kind of history and narratives written from it.