Record Nr. UNINA9910349271203321 Information Technologies and Mathematical Modelling. Queueing **Titolo** Theory and Applications: 18th International Conference, ITMM 2019. Named after A.F. Terpugov, Saratov, Russia, June 26–30, 2019, Revised Selected Papers / / edited by Alexander Dudin, Anatoly Nazarov, Alexander Moiseev Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 3-030-33388-4 **ISBN** Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (xi, 327 pages): illustrations Communications in Computer and Information Science, , 1865-0929;; Collana 1109 Disciplina 519.82 Soggetti Mathematical statistics Computer science—Mathematics Computer communication systems Computer system failures Coding theory Information theory Probability and Statistics in Computer Science Mathematics of Computing Computer Communication Networks System Performance and Evaluation Coding and Information Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto On the Busy Period in a Finite-Source Retrial Queue with Outgoing Calls -- An Algorithmic Approach for the Analysis of Finite-Source M/GI/1 Retrial Queueing Systems with Collisions and Server Subject to Breakdowns and Repairs -- Available throughput of transport connection with selective repeat mode in the loaded data transmission path -- Articial Regeneration Based Regenerative Estimation of

Multiserver System with Multiple Vacations Policy -- On combining stochastic and deterministic models -- Estimation of the Probability

Density Parameters of the Interval Duration between Events in Correlated Semi-synchronous Event Flow of the Second Order by the Method of Moments -- Special retrial gueues with state-dependent input rate -- Redundant Queueing System with Hysteresis Backup Server Connection Strategy -- The laws of conservation of ows in acyclic queueing networks -- Performance Analysis and Optimal Control for Queueing System with a Reserve Unreliable Server Pool --Study of a service process by a loop algorithm by means of a stopped random walk -- Resource queueing system MMP P (2,)|GI2| with parallel service of multiple paired customers -- Modelling of Virtual Radio Resources Slicing in 5G Networks -- A multiphase gueueing model for performance analysis of a multi-hop IEEE 802.11 wireless network with DCF channel access -- Single Server Queues with Batch Poisson Input and Multiple Types of Outgoing Calls -- Rened Approximate Algorithm for Steady-State Probabilities of the Large Scale Queuing Systems with Instantaneous and Delayed Feedback --Estimation of the Probability Density Parameters of the Interval Duration between Events in Correlated Synchronous Generalized Flow of the Second Order -- On a two-server queue with consultation in random environment -- Asymptotic Analysis of Retrial Queueing System M/GI/1 with Collisions and Impatient Calls -- Production Inventory System with Positive Service Time under Local Purchase -- On the Total Amount of the Occupied Resources in the Multi-resource QS with Renewal Arrival Process -- Simulation of nite-source retrial queues with two-way communications to the orbit -- On the Geo/G/1 System -- Methods to Reduce Loss Probability in Systems with Innite Service Time Dispersion -- On a queue with postponed work under N-

Sommario/riassunto

This book constitutes the proceedings of the 18th International Conference on Information Technologies and Mathematical Modelling, ITMM 2019, named after A.F. Terpugov, held in Saratov, Russia, in June 2019. The 25 full papers presented in this volume were carefully reviewed and selected from 72 submissions. The conference covers various aspects of information technologies, focusing on queueing theory, stochastic processes, Markov processes, renewal theory, network performance equation and network protocols.