Record Nr. UNISA996466132103316 Distributed Algorithms [[electronic resource]]: 8th International **Titolo** Workshop, WDAG 1994, Terschelling, The Netherlands, September 29 -October 1, 1994. Proceedings / / edited by Gerard Tel, Paul Vitanyi Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 1994 **ISBN** 3-540-48799-9 Edizione [1st ed. 1994.] 1 online resource (X, 378 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743 ; ; 857 Collana 004/.36 Disciplina Soggetti Computers Software engineering Computer programming Algorithms Computer communication systems Theory of Computation Software Engineering/Programming and Operating Systems Computation by Abstract Devices **Programming Techniques** Algorithm Analysis and Problem Complexity Computer Communication Networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Replicated file management in large-scale distributed systems --Realization of PRAMs: Processor design -- Factoring -- Primary partition "Virtually-synchronous communication" harder than consensus -- Secure distributed computing: Theory and practice --Fast increment registers -- Coping with contention -- Exotic behaviour of consensus numbers -- Space-optimum conflict-free construction of 1-writer 1-reader multivalued atomic variable -- Linear-time snapshot using multi-writer multi-reader registers -- Fast, long-lived renaming -- Anomalies in the wait-free hierarchy -- Finding the extrema of a distributed multiset -- The level of handshake required for establishing

a connection -- Local labeling and resource allocation using

preprocessing -- A scalable approach to routing in ATM networks -- Low complexity network synchronization -- An incremental distributed algorithm for computing biconnected components -- Reaching (and maintaining) agreement in the presence of mobile faults -- Uniform deterministic self-stabilizing ring-orientation on odd-length rings -- Using failure detectors to solve consensus in asynchronous shared-memory systems -- An algorithm with optimal failure locality for the dining philosophers problem -- Average and randomized complexity of distributed problems -- Self-stabilization by local checking and global reset -- Breakpoints and time in distributed computations -- Cheaper matrix clocks.

Sommario/riassunto

This volume presents the proceedings of the 8th International Workshop on Distributed Algorithms (WDAG '94), held on the island of Terschelling, The Netherlands in September 1994. Besides the 23 research papers carefully selected by the program committee, the book contains 3 invited papers. The volume covers all relevant aspects of distributed algorithms; the topics discussed include network protocols, distributed control and communication, real-time systems, dynamic algorithms, self-stabilizing algorithms, synchronization, graph algorithms, wait-free algorithms, mechanisms for security, replicating data, and distributed databases.