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Nota di contenuto	Distributed Community Detection in Dynamic Graphs -- Exploration of the T -Interval-Connected Dynamic Graphs: The Case of the Ring -- A Characterization of Dynamic Networks Where Consensus Is Solvable -- Self-adjusting Grid Networks to Minimize Expected Path Length -- On Advice Complexity of the k-server Problem under Sparse Metrics -- Connected Surveillance Game -- Non-Additive Two-Option Ski Rental -- Competitive FIB Aggregation for Independent Prefixes: Online Ski Rental on the Trie -- A Nonmonotone Analysis with the Primal-Dual Approach: Online Routing of Virtual Circuits with Unknown Durations -- Self-organizing Flows in Social Networks -- Performance/Security Tradeoffs for Content-Based Routing Supported by Bloom Filters -- Influence Diffusion in Social Networks under Time Window Constraints -- Analysis of Fully Distributed Splitting and Naming Probabilistic

Procedures and Applications -- A Deterministic Worst-Case Message Complexity Optimal Solution for Resource Discovery -- Maintaining Balanced Trees for Structured Distributed Streaming Systems -- Rendezvous of Two Robots with Constant Memory -- Pattern Formation by Mobile Robots with Limited Visibility -- Optimal Gathering of Oblivious Robots in Anonymous Graphs -- Probabilistic Connectivity Threshold for Directional Antenna Widths -- Broadcasting in Ad Hoc Multiple Access Channels -- Profit Maximization in Flex-Grid All-Optical Networks -- Measuring the Impact of Adversarial Errors on Packet Scheduling Strategies -- Optimal Buffer Management for 2-Frame Throughput Maximization -- Dynamically Maintaining Shortest Path Trees under Batches of Updates -- Simultaneous Consensus vs Set Agreement: A Message-Passing-Sensitive Hierarchy of Agreement Problems -- Steiner Problems with Limited Number of Branching Nodes -- Exact and Approximate Algorithms for Movement Problems on (Special Classes of) Graphs -- Maximum Distance Separable Codes Based on Circulant Cauchy Matrices.

| Sommario/riassunto | This book constitutes the thoroughly refereed post-conference proceedings of the 20th International Colloquium on Structural Information and Communication Complexity, SIROCCO 2013, held in Ischia, Italy, in July 2013. The 28 revised full papers presented were carefully reviewed and selected from 67 submissions. SIROCCO is devoted to the study of communication and knowledge in distributed systems. Special emphasis is given to innovative approaches and fundamental understanding, in addition to efforts to optimize current designs. The typical areas include distributed computing, communication networks, game theory, parallel computing, social networks, mobile computing (including autonomous robots), peer to peer systems, communication complexity, fault tolerant graph theories and randomized/probabilistic issues in networks. |