

Table of Contents

Invited Talks

Invited Talk I Actuator Nets: Folding, Reconfiguring and Deploying Sensors	1
<i>Erik D. Demaine</i>	
Invited Talk II The Power and Limitations of Simple Algorithms: A Partial Case Study of Greedy Mechanisim Design for Combinatorial Actions	2
<i>Allan Borodin</i>	

Index

Sensor Field: A Computational Model	3
<i>Carme Álvarez, Amalia Duch, Joaquim Gabarro, and Maria Serna</i>	
Near-Optimal Radio Use for Wireless Network Synchronization	15
<i>Milan Bradonjić, Eddie Kohler, and Rafail Ostrovsky</i>	
Approximating Barrier Resilience in Wireless Sensor Networks	29
<i>Sergey Bereg and David Kirkpatrick</i>	
Improved Approximation Algorithms for Maximum Lifetime Problems in Wireless Networks	41
<i>Zeev Nutov and Michael Segal</i>	
On Active Attacks on Sensor Network Key Distribution Schemes	52
<i>Stefan Dziembowski, Alessandro Mei, and Alessandro Panconesi</i>	
Key Levels and Securing Key Predistribution against Node Captures	64
<i>Jacek Cichoń, Jarosław Grząsiewicz, and Mirosław Kutylowski</i>	
Revisiting DoS Attacks and Privacy in RFID-Enabled Networks	76
<i>Paolo D'Arco, Alessandra Scafuro, and Ivan Visconti</i>	
Link Reversal: How to Play Better to Work Less	88
<i>Bernadette Charron-Bost, Jennifer L. Welch, and Josef Widder</i>	

Early Obstacle Detection and Avoidance for All to All Traffic Pattern in Wireless Sensor Networks	102
<i>Florian Huc, Aubin Jarry, Pierre Leone, Luminita Moraru, Sotiris Nikoletseas, and Jose Rolim</i>	
A Note on Uniform Power Connectivity in the SINR Model	116
<i>Chen Avin, Zvi Lotker, Francesco Pasquale, and Yvonne-Anne Pignolet</i>	
Locating a Black Hole without the Knowledge of Incoming Link	128
<i>Peter Glaus</i>	
Energy Efficient Alert in Single-Hop Networks of Extremely Weak Devices	139
<i>Marek Klonowski, Mirosław Kutylowski, and Jan Zatopiański</i>	
Brief Announcement: Universal Data Aggregation Trees for Sensor Networks in Low Doubling Metrics	151
<i>Srivathsan Srinivasagopalan, Costas Busch, and S. Sitharama Iyengar</i>	
Brief Announcement on MOGRIBA: Multi-Objective Geographical Routing for Biomedical Applications of WSN	153
<i>Djamel Djenouri and Ilanko Balasingham</i>	
Routing on Delay Tolerant Sensor Networks	155
<i>Michael Keane, Evangelos Kranakis, Danny Krizanc, and Lata Narayanan</i>	
Better Face Routing Protocols	167
<i>Xiaoyang Guan</i>	
Building a Communication Bridge with Mobile Hubs	179
<i>Onur Tekdas, Yokesk Kumar, Volkan Isler, and Ravi Janardan</i>	
Compressing Kinetic Data from Sensor Networks	191
<i>Sorelle A. Friedler and David M. Mount</i>	
Relocation Analysis of Stabilizing MAC Algorithms for Large-Scale Mobile Ad Hoc Networks (Extended Abstract)	203
<i>Pierre Leone, Marina Papatriantafilou, and Elad M. Schiller</i>	
Deterministic Collision Free Communication Despite Continuous Motion	218
<i>Saira Viqar and Jennifer L. Welch</i>	
Self-stabilizing Deterministic Gathering	230
<i>Yoann Dieudonné and Franck Petit</i>	

Gossiping in Jail	242
<i>Avery Miller</i>	
Complexity and Approximation of a Geometric Local Robot Assignment Problem	252
<i>Olaf Bonorden, Bastian Degener, Barbara Kempkes, and Peter Pietrzyk</i>	
Author Index	263