

# International Workshop on Theoretical and Algorithmic Aspects of Wireless Ad Hoc, Sensor, and P2P Networks

**Department of Computer Science, Illinois Institute of Technology**

## Technical Program, Friday, June 11<sup>th</sup>, 2004

<b>8:00-9:00</b>	<b>Registration and Breakfast</b>
8:45-9:00	Workshop Opening (Dean of CSL of IIT Buck McMorris)
Keynote Session 1 (Chair Professor of CS of IIT: Ophir Frieder)	
9:00-10:00	Keynote speech: Nitin Vaidya (UIUC), Topic: TBA
10:00-10:20	Break
Technical Session 1: Routing (Ivan Stojmenovic)	
10:20-10:45	Low Power Hitch-hiking Broadcast in Ad Hoc Wireless Networks (M. Cardei)
10:45-11:10	Efficient Broadcasting in Wireless Ad Hoc Networks Using Directional Antennas (J.Wu)
11:10-11:35	Fault-Tolerant Relay Node Placement in Wireless Sensor Networks (Hai Liu, replaced by Chihwei Yi)
11:35-12:00	New Constructions On Broadcast Encryption & Key PreDistribution Schemes (C.Huang)
12:00-1:30	Lunch
Technical Session 2: Topology Control I (BaoChun Li)	
1:30-1:55	An Approximation Algorithm for Connected Dominating Set in Ad Hoc Networks (X. Cheng)
1:55-2:20	Localized Construction of Connected Dominating Set in Wireless Networks (My Thai)
2:20-2:45	Efficient Weighted Backbone Construction for Wireless Ad Hoc Networks (Y. Wang)
2:45-3:10	On Employing Distributed Algorithms and Evolutionary Algorithms in Managing Wireless Sensor Networks (Syed I. Nayer)
3:10-3:30	Break
Technical Session 2: Data Gathering and Scheduling (Jie Wu)	
3:30-3:55	An Energy Efficient Protocol for Data Gathering in Wireless Sensor Networks (G. Xue)
3:55-4:20	Scheduling Algorithms in Wireless Sensor Networks (M. Cheng)
4:20-4:45	Data gathering and activity scheduling in ad hoc and sensor Networks (I. Stojmenovic)
4:45-5:10	Reliable Data Storage and Dissemination in Mobile Ad Hoc Networks (Hua Lu)
5:10—6:30	Posters
6:30-8:30	Dinner and Keynote session 2 (Zhili Zhang)
	Taieb Znati: TBA

## Technical Program, Saturday, June 12<sup>th</sup>, 2004

8:00-9:00	<b>Registration and Breakfast</b>
8:45-9:00	Workshop Opening
Keynote Session 3 (Peng-Jun Wan)	
9:00-10:00	Keynote speech: Roger Wattenhofer (ETH) Topic: Clustering and Topology Control in Ad-Hoc and Sensor Networks
10:00-10:20	Break
Technical Session 4: Non-cooperative Computing (XiangYang Li)	
10:20-10:45	Strategyproof Mechanisms towards Evolutionary Topology Formation in Autonomous Networks (Baochun Li)
10:45-11:10	K-Anycast Games in Selfish Networks (WeiZhao Wang)
11:10-11:35	Market Sharing Games Applied to Content Distribution in Ad Hoc networks (V.Mirroknj)
11:35-12:00	Secure Cooperative Cache Based Data Access in Ad Hoc Networks (G. Cao)
12:00-1:30	Lunch
Technical Session 5: Topology Control II (GuoHong Cao)	
1:30-1:55	Localized Power Efficient Topology for Wireless Ad-hoc Networks (Wen-Zhan Song)
1:55-2:20	Interference Aware Topology Control for Wireless Ad Hoc Networks (K. Moaveni-Nejad)
2:20-2:45	Location Service in Ad Hoc Networks: Modeling and Analysis (Zhili Zhang)
2:45-3:10	Wireless Sensor Network Framework Design (Sheikh I Ahamed)
3:10-3:30	Break
Technical Session 6: Other Topics (M. Cardel)	
3:30-3:55	Mobility Features in Ad Hoc Wireless Networks (Dongsoo Kim)
3:55-4:20	A Network Information Theory for Wireless Communication: Scaling Laws and Optimal Operation (P. Kumar)
4:20-4:45	Antenna Division Multiple Access (ADMA) for Ad-Hoc MIMO Wireless Networks (Yoav Atzmon)
4:45-5:10	TBA (HongHai Zhang of UIUC)
5:10-5:35	TBA: (Richard Han of University of Colorado)
5:45-	Touring Chicago (free time)