

Final Program — Adhoc Now 2005  
October 6–8, 2004 in Cancun, Mexico  
[http://fismat.umich.mx/adhoc\\_now/](http://fismat.umich.mx/adhoc_now/)

Thursday, October 6th

**9:00 – 10:00 Invited Talk**

Another Look at Dynamic Ad Hoc Wireless Networks ..... *J.J. Garcia-Luna-Aceves*

**10:00–11:00 Session 1: Multicasting, Chair: Yanni Nikolaidis**

DPUMA: A Highly Efficient Multicast Routing Protocol for Mobile Ad Hoc Networks ..... *Rolando Menchaca-Mendez, Ravindra Vaishampayan, J.J. Garcia-Luna-Aceves and Katia Obraczka*

Approximation Algorithms for Minimum Bandwidth Multicast Trees in Wireless Mesh Networks .... *Pedro M. Ruiz and Antonio F. Gomez-Skarmeta*

**11:00–11:15 Coffee Break**

**11:15–12:15 Session 2: Security, Chair: Pedro Ruiz**

Enhancing The Security Of On-demand Routing in Ad Hoc Networks ..... *Zhenjiang Li and J.J. Garcia-Luna-Aceves*

A Key Management Scheme for Commodity Sensor Networks . *Yong Ho Kim, Mu Hyun Kim, Dong Hoon Lee and Changwook Kim*

**12:15–15:00 Lunch Break**

**15:00–16:30 Session 3: Broadcast, Chair: Thomas Kunz**

Message Stability and Reliable Broadcasts in Mobile Ad-Hoc Networks *Kulpreet Singh, Andronikos Nedos, Gregor Gärtner and Siobhán Clarke*

Equilibria for Broadcast Range Assignment Games in Ad-Hoc Networks *Pilu Crescenzi, Miriam Di Ianni, Alessandro Lazzoni, Paolo Penna, Gianluca Rossi and Paola Vocca*

Efficient Broadcasting in Self-Organizing Multi-hop Wireless Networks .. *Nathalie Mitton and Eric Fleury*

**16:30–16:45 Coffee Break**

**16:45–19:15 Session 4: Network Characterization, Chair: Kennie Jones**

Performance Analysis of the Hierarchical Layer Graph for Wireless Networks ... *Stefan Rührup, Christian Schindelhauer and Klaus Volbert*

A Multiple Path Characterization of Ad-Hoc Network Capacity .....*Peter Giese and Ioanis Nikolaidis*  
Probability Distributions for Channel Utilisation .....*Christian Schindelhauer and Kerstin Voß*

## Friday, October 7th

### 9:00–11:00 Session 5: MAC Layer, Chair: Christian Schindelhauer

Playing CSMA/CA Game to Deter Backoff Attacks in Ad Hoc Wireless LANs ..... *Jerzy Konorski*  
Increasing the Resource-Efficiency of the CSMA/CA Protocol in Directional Ad Hoc Networks . *Matthias Grünwald, Feng Xu and Ulrich Rückert*  
Design of a Hard Real-Time Guarantee for Dual Ad hoc Mode IEEE 802.11 WLANs ..... *Junghoon Lee, Mikyung Kang and Gyungleen Park*  
Reed-Solomon and Hermitian Code-based Scheduling Protocols for Wireless Ad Hoc Networks . *Carlos H. Rentel and Thomas Kunz*

### 11:00–11:15 Coffee Break

### 11:15–12:15 Session 6: Location Tracking and Routing, Chair: Ladislav Stacho

Location Tracking in Mobile Ad Hoc Networks using Particle Filters .. *Rui Huang and Gergely V. Záruba*  
Enhanced Power-Aware Routing for Mobile Ad-Hoc Networks ..... *Il-Hee Shin and Chae-Woo Lee*

### 12:15–15:00 Lunch Break

### 15:00–16:30 Session 7: Ad Hoc Routing, Chair: K. Subramani

Randomized AB-Face-AB Routing Algorithms in Mobile Ad Hoc Networks . *Thomas Fevens, Alaa Eddien Abdallah, and Badr Naciri Bennani*  
Selective Route Request Scheme for On-Demand Routing Protocols in Ad Hoc Networks . *Seung Jae Lee, Joo San Youn, Seok Hyun Jung, Jihoon Lee and Chul Hee Kang*  
Stressing is Better Than Relaxing for Negative Cost Cycle Detection in Networks ..... *K. Subramani*

### 16:30–16:45 Coffee Break

### 16:45–19:15 Session 8: Sensor Network Algorithms, Chair: Tony Garcia

Efficient Mechanisms for Secure Inter-node and Aggregation Processing in Sensor Networks ..... *Tassos Dimitriou*  
A Gathering Point Detection Scheme for Directed Diffusion in Wireless Sensor Networks ... *Jeongho Son, Jinsuk Pak and Kijun Han*  
Biology Inspired Distributed Consensus in Massively-Deployed Sensor Networks ..... *Kennie H. Jones, Kenneth N. Lodding, Stephan Olariu, Larry Wilson and Chunsheng Xin*

## Saturday, October 8th

### 9:00 – 10:00 Invited Talk

Routing in Wireless Networks and Local Solutions for Global Problems ..... *Jorge Urrutia*

**10:00–11:00 Session 9: Vehicular Ad Hoc Networks and Sensor Network Applications, Chair: Jerzy Konorski**

Cluster-Based Framework in Vehicular Ad-Hoc Networks ... *Peng Fan, James G. Haran, John Dillenburg and Peter C. Nelson*

An Intelligent Sensor Network for Oceanographic Data Acquisition . *Chris Roadknight, Antonio Gonzalez, Laura Parrot, Steve Boulton and Ian Marshall*

**11:00–11:15 Coffee Break**

**11:15–12:15 Session 10: Cache Placement, and MIMO Chair:**

Cache Placement in Sensor Networks Under Update Constraint .... *Bin Tang, Samir Das, and Himanshu Gupta*

MIMOMAN: A MIMO MAC protocol for Ad hoc Networks ..... *Joon-Sang Park and Mario Gerla*

**12:15 Closure**

**15:00 Excursion**

**20:30 Conference Dinner**