



Multiaccess, Mobility and Teletraffic for Wireless Communications

December 3~6, 2000,
Hawk's Cay Resort, Duck Key, Florida, USA

Sponsored by IEEE Communications Society

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For more information, please visit the MMT 2000 website:
<http://www.ece.gatech.edu/users/stuber/MMT2000>

Program

Sunday, December 3, 2000

Welcome Reception
6:00 pm - 9:00 pm

Monday, December 4, 2000

Breakfast
7:30 am - 8:30 am

Session 1
SPACE-TIME ACCESS SCHEMES
8:30 am - 10:15 am

1 Session Chair - Reinaldo Valenzuela, Lucent Technologies, USA		
1.1	Ana Perez-Neira and Javier Fonollosa Universitat Politecnica de Catalunya	"The METRA (Multi-Element Transmit and Receive Antennas) Project"
1.2	Mathini Sellathurai and Simon Haykin, McMaster University, USA	"TURBO-BLAST: A Novel Technique for Multi-transmit Multi receive Wireless Communications"
1.3	Jaiganesh Balakrishnan, Cornell University, Harish Viswanathan and Markus Rupp, Lucent Technologies, USA	"Optimal Channel Training for Multiple Antenna Systems"
1.4	Stefano Buzzi and Marco Lops, Universita degli studi di Cassino	"Code -Aided Multi-user Detection in Dispersive CDMA channels"
1.5	Persefoni Kyritsi, Stanford University, Peter Wolniansky and Reinaldo Valenzuela Lucent Technologies, USA	"Indoor BLAST Measurements: Capacity of Multi-element Antenna Systems"

Break
10:15 am - 10:45 am

Session 2
WIRELESS INTERNET
10:45 am - 12:30 am

2 Session Chair - Justin Chuang and Li-Fung Chang, AT&T-Labs Research, USA		
2.1	Eduardo Esteves, Qualcomm, USA	"The High Data Rate Evolution of the cdma2000 Cellular System"
2.2	N.K. Shankaranarayanan, Zhimei Jiang and Partho Mishra, AT&T Labs-Research, USA	"User -Perceived Performance of Web -Browsing and Interactive Data Applications in TDMA Packet Wireless Networks"
2.3	Wessam Aïib and Philippe Godlewski, ENST, France	"Resource Allocation Schemes for Voice and Data Integ ration over Wireless Cellular Networks"
2.4	G. Bajko and B. Bertenyi, Nokia Networks, Hungary	"SIP-sessions between a 3G-Network and a SIP-proxy Traversing NAT-PT"

Luncheon
12:30 pm - 2:00 pm

Session 3
RESOURCE MANAGEMENT
2:00 pm - 3:45 pm

3	Session Chair - Stephen S. Rappaport, SUNY-Stony Brook, USA	
3.1	E. Dinan, M. Kasmi, P. Godlewski, B. Jabbari*, George Mason University, USA	"Resource Allocation for Soft Handoff in Wireless Packet CDMA"
3.2	M. Sherif*, I. Habib, M. Naghshineh, P. Kermani, CUNY, USA	"Adaptive Channel Borrowing Algorithm for Multimedia Wireless/Mobile Networks"
3.3	Peter H.J. Chong and Cyril Leung*, University of British Columbia-Vancouver, Canada	"Performance of Channel Assignment Schemes with PRMA in Cellular Systems"
3.4	Krishna P Paul, Romit RoyChoudhuri and S. Bandyopadhyay*, Pricewaterhouse Coopers Ltd. - Calcutta, Canada	"Survivable Ad Hoc Wireless Networks: Some Design Specifications"

Dinner
6:00 pm - 9:00pm

Tuesday, December 5, 2000

Breakfast
7:30 am - 8:30 am

Session 4
ERROR AND QOS CONTROL PROTOCOLS
8:30 am - 10:15 am

4	Session Chair - K-C Chen, National Taiwan University, Taiwan	
4.1	Michele Zorzi, Gianluca Mazzini, Velio Tralli and Alessandra Giovanardi, Universita di Ferrara, Italy	"Some Results on the Error Statistics over a WCDMA Air Interface"
4.2	Fredrik Berggren and Seong-Lyun Kim, Royal Institute of Technology, Sweden	"Energy Efficient Downlink Power Control and Scheduling for CDMA Non-Real Time Data"
4.3	Kamran Sayrafian-Pour and Anthony Ephremides, University of Maryland, USA	"An Information-Theoretic Analysis to Evaluate Joint Time & Space Splitting in Random Access Algorithms"
4.4	Natt Smavatkul and Scott F. Midkiff, Virginia Polytechnic & State University, USA	"Impact of High-End Radio Functionality in Wireless Mobile Ad Hoc Networks"
4.5	Kin K. Leung, Peter F. Driessen, Kapil Chawla, and Xiaoxin Qiu, At&T Labs - Research, USA	"Performance Improvement for Streaming Services by Link Adaptation and Power Control in EGPRS Wireless Networks"

Break
10:15 am - 10:45 am

Session 5
MAC PROTOCOLS
10:45 am - 12:30 am

5	Session Chair - Vaduvur Bharghavan, UIUC, USA	
5.1	Jeffrey P. Monks, Center for Reliable and High-Performance Computing, University of Illinois at Urbana-Champaign, USA	"Power Controlled Multiple Access In Ad Hoc Networks"
5.2	Haiyun Luo, Songwu Lu, University of California - Los Angeles, USA	"Achieving Fair Service in Large-scale Multiple Access Networks"
5.3	Mahesh K. Marina, University of Cincinnati, George D. Kondylis, HRL Laboratories, Ulas C. Kozat, University of Maryland, USA	"A Reservation-based Medium Access Control (MAC) Protocol for Reliable Broadcasts in Mobile Ad Hoc Networks"

Luncheon
12:30 pm - 2:00 pm

Session 6
TRAFFIC AND MOBILITY MODELS
2:00 pm - 3:45 pm

6	Session Chair - Bihan Jabbari, GMU, USA	
6.1	Guodong Zhang and Stephen S. Rappaport, State University of New York - Stony Brook, USA	"A Medium Access for Voice, Self Similar Traffic and Data Integration in DS-CDMA Personal Communication Networks"
6.2	Masaki Aida and Shinichiro Shinomiya, NTT Advanced Technology Corporation, Kazuyoshi Saitoh, Noriteru Shinagawa and Takehiko Kobayashi, YRP Mobile Telecommunications, Key Technology Research Laboratories Co., Ltd., Japan	"Diffusion Model for Multimedia and Mobile Traffic based on Population Process for Active Users in a Microcell"
6.3	Shun-Zheng Yu, Hisashi Kobayashi, Princeton University, USA and Brian L. Mark, George Mason University, USA	"Mobility Tracking and Traffic Characterization for Efficient Wireless Internet Access"
6.4	Hirotoishi Hidaka, Kazuyoshi Saitoh, Noriteru Shinagawa, Takehiko Kobayashi, YRP Mobile Telecommunications, Key Technology Research Laboratories Co., Ltd., Japan	"Statistical Properties of Measured Vehicle Motion and Teletraffic in Cellular Communications"

Dinner
6:00 pm - 9:00pm

Wednesday, December 6, 2000

Breakfast
7:30 am - 8:30 am

Session 7
FUTURE WIRELESS SYSTEMS
8:30 am - 10:15 am

7 Session Chair - Ramjee Prasad, Aalborg University, Denmark		
7.1	Ramjee Prasad, Aalborg University, Denmark	"Wireless Next Generation: 4G?"
7.2	Ana Lucia Iacono, Ashok Rudrapatna and Pengfei Zhu, Lucent Technologies, USA	"The Enhanced Access Channel in cdma2000: Overview and Performance Evaluation"
7.3	Slimane Ben Slimane and Mikael Gidlund, Royal Institute of Technology, Sweden	"Performance of Wireless LANs in Radio Channels"
7.4	Robert S. Karlsson, Royal Institute of Technology, Sweden and David Everitt, Swinburne University of Technology, Australia	"Teletraffic Capacity of Hierarchical CDMA Cellular Networks"
7.5	Farooq Khan, Kamesh Medepalli, Sarath Kumar and Sanjiv Nanda, Lucent Technologies, USA	"Performance of Data Applications over a CDMA Air Interface"

Break
10:15 am - 10:45 am

Session 8
CALL ADMISSION CONTROL
10:45 am - 12:30 am

8 Session Chair - Gordon L. Stüber, Georgia Institute of Technology, USA		
8.1	Yang Xiao, C. L. Philip Chen and Yan Wang, Wright State University, USA	"Call Admission Control and Bandwidth Reallocation Algorithm for Multi-Classes of Adaptive Multimedia Service in Wireless/Mobile Networks"
8.2	John Y. Kim and Gordon L. Stüber, Georgia Institute of Technology, USA	"Performance Analysis of Macrodiversity Voice/Data CDMA Systems"
8.3	Marjan Bozinovski and Liljana Gavrilovska, Institute of Telecommunications, Republic of Macedonia	"Distributed Adaptive Admission Control in Mobile Multimedia Network"
8.4	Yeong Min Jang, ETRI, Korea	"Transient and Approximation Approach for Connection Admission Control in CDMA Systems"

MMT 2000 Registration Form

Please print out and then fill out this form. Please print or type clearly. Only one registrant per registration form.

(1) Personal Information

Name _____ Dr. Mr. Ms. Middle Initial _____
 Last (Family) _____ First (Given) _____
 Name for Badge (if different) _____
 Company / Organization Name _____
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 Mailing Address _____
 Street / PO Box _____ City _____ State / Province _____ Postal / Zip _____
 E-mail Address _____
 Phone Number _____ Fax Number _____

(2) Registration Fee (US Dollars)

	On or Before Nov. 15	After Nov. 15	
<input type="checkbox"/> Full Registration	\$275	\$350	\$ _____
<input type="checkbox"/> Student / Life Member Registration	\$50	\$50	\$ _____
		Total Amount	\$ _____

(3) Fee Payment (Only by Check or Credit Card)

Payment by Check (payable to **IEEE 2000 MMT** in US dollars)
 Payment by Credit Card
 VISA MasterCard
 Card Number _____ Expiration Date ____/____ (mo/yr)
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 Cardholder Signature _____ Date _____

Registration will be completed only upon receipt of payment.
Please return this form:

by fax to (+1) 404-894-7883 or by mail to
Bruce Worthman
IEEE Communications Society
305 East 47th St., 9th Floor
New York, NY 10017, USA

Hotel Reservation Form

HAWK'S CAY RESORT WELCOMES

IEEE Communication Workshop (MMT 2000), December 3 - 6, 2000

GROUP CODE: 297264

Arrival Date: _____ Arrival Time: _____ Departure Date: _____

Name: _____ Signature: _____

Company: _____

Telephone (Work): _____ Telephone (Home): _____

Address: _____ City: _____ State: _ Zip: __

Credit Card Type (Circle One): Mastercard Visa Discover Diners American Express

Credit Card Number: _____ Expiration Date: _____

Name on Card: _____ Signature: _____

Number of Guests in Room (Ages, if Children): _____

(Children 17 and under are free, extra person charge is \$25-00 per night.)

Guestroom, single \$246.00 package rate for single person occupancy per night

Guestroom with Spouse, double \$307.28 package rate

ACCOMMODATIONS: Check in 4:00 pm / Check out 11:00 am

Smoking Non-Smoking

Package includes:

- Guestroom accommodations including tax and resort fee
- One hot & cold reception with two drink coupons for wine or beer inclusive of tax and service charge
- Two group lunches inclusive of tax and service charge
- Three breakfast buffets inclusive of tax and service charge
- Two group dinners including two drink coupons for wine or beer inclusive of tax and service charge
- Two breaks daily for three days inclusive of tax and service charge

Spouse Package includes:

- Single package
- One additional reception and two additional dinners

CANCELLATION POLICY IS SEVEN DAYS PRIOR TO ARRIVAL

CANCELLATION WITHIN SEVEN DAYS WILL RESULT IN FORFEITURE OF DEPOSIT

CANCELLATION AT ANY TIME AFTER RESERVATION IS CONFIRMED WILL RESULT IN A \$25.00 FEE

RESERVATION FORMS MUST BE COMPLETED AND RETURNED TO:

Reservations Department, Hawk's Cay Resort

51 Hawk's Cay Boulevard, Duck Key, FL 33050

Website: www.hawkscay.com, Phone: 888-809-7459 / Fax: 305-743-0641

THIS TELEPHONE LINE IS FOR GROUP RESERVATIONS ONLY

Please complete one form for each room needed, a confirmation will be mailed.

First nights room deposit will automatically be charged to your credit card.

Reservations must be received by **November 3, 2000** to guarantee your room and the group rate.

[NOTICE]

Unfortunately, there are NO longer commercial airline flights into Marathon Airport.

To travel to Hawk's Cay Resort, there are two options;

1) Fly into Miami International Airport and rent a car. Hawk's Cay resort is about two hours drive from Miami. This is the recommended option.

2) Fly into Key West Airport connecting through Miami International Airport. There are many flights each day from Miami to Key West. Hawk's Cay resort is about 60 miles from Key West. Either rent a car in Key West or take a taxi.

Thank you.