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Fumie Ono¹, Hiromasa Habuchi²; ¹Tokyo University of Science, Japan ; ²Ibaraki University, Japan
- Data Dissemination Protocol with Constructing Two Power-Efficient Alternate Routes to Maintain More Sensing Area and Time in Wireless Sensor Networks** III - 1718
Tomoki Kimura, Yasuhiro Tsutsui, Takeshi Murakami, Iwao Sasase, Keio University, Japan
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Session TA 21 - ORAL
Wireless Sensors and Data Fusion II

Chair: Dr. Jens Dalsgaard Nielsen, Aalborg University, Denmark

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- A Robust Trimmed EGC Fusion Rule in Wireless Sensor Networks Over Non-Gaussian and Fading Channels** III - 1723
Jintae Park¹, Hyunduk Kang², Seokjin Sung², Kiseon Kim¹; ¹GIST, Korea ; ²GIST, Korea
- Empirical Approach for Decentralized Sequential Detection in Wireless Sensor Networks** ... III - 1728
Seungho Bae, Hyunduk Kang, Kiseon Kim, GIST, Korea
- A Synchronous Approach to Reduce Wireless Sensor Networks Consumption** III - 1733
Paolo Zebelloni, Maurizio Corino, C-Labs S.r.l., Italy
- Cooperative Diversity in Wireless Sensor Networks** III - 1738
Matteo Lucchi, Andrea Giorgetti, Marco Chiani, University of Bologna, Italy
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Session TA 27 - POSTER
Modeling and Simulation - Poster

Organizers: Technical Program Committee

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- Modelling and Simulation of Correlated Time-Variant Channels for Diversity Systems** III - 1743
Lorenzo Rubio, Alexis P. García, David Argilés, Narcís Cardona, Universidad Politécnica de Valencia, Spain
- Simulation of UMTS Capacity in Microcellular Urban Environment** III - 1747
Jaroslav Holis, Pavel Pechac, Petr Ledl, Czech Technical University in Prague, Czech Republic
- Performance Comparison of Two Dynamic System Simulators Over COST273-MORANS Reference Scenarios** III - 1751
José Monserrat¹, Riccardo Patelli², Narcís Cardona¹; ¹Universidad Politécnica de Valencia, Spain ; ²Wireless Future, Italy
- Impact of Co-Interference on Bluetooth and WLAN Indoor Wireless Clusters** III - 1756
Y.K. Casey, A.N. Al-Khwildi, S.R. Chaudhry, H.S. Al-Raweshidy, Brunel University, U.K.
- Study on Uplink Capacity of the DS-CDMA Cellular System Using Channel Segregation** III - 1761
Sho Nogami, Junichi Yoshino, Salesian Polytechnic, Japan
- Modeling Packet Collision Probability in Personal Area Networks Over Bluetooth** III - 1766
José Luis Valenzuela¹, Ángela Hernández², Antonio Valdovinos²; ¹Universitat Politècnica de Catalunya, Spain ; ²Universidad de Zaragoza, Spain

The Impact of RLC Delivery Sequence on FTP Performance in UMTS	III - 1771
<i>Oumer M. Teyeb¹, Malek Boussif¹, Troels B. Sørensen¹, Jeroen Wigard², Preben E. Mogensen¹;</i>	
<i>¹Aalborg University, Denmark ; ²Nokia Networks R&D, Denmark</i>	
A Simple Wireless Channel Simulation Model Based on Real Office Environments	III - 1776
<i>Ramón Agüero, José Antonio Galache, Marta García, Luis Muñoz, University of Cantabria, Spain</i>	
Discrete Channel Models for IEEE 802.11a	III - 1781
<i>B. Bardón, I. Seoane, Víctor P. Gil Jiménez, M.P. Sánchez, Ana García Armada, University Carlos III de Madrid, Spain</i>	
On Traffic Modelling in GPRS Networks	III - 1785
<i>Tatiana Kozlova Madsen¹, Hans-Peter Schwefel¹, Martin B. Hansen¹, Jan Bøgh², Ramjee Prasad¹;</i>	
<i>¹Aalborg University, Denmark ; ²Sonofon A/S, Denmark</i>	

Session MA 12 - ORAL Modeling and Simulation I

Chair: Dr. Masahiro Umehira, NTT, Japan

A Study of the MIMO Channel Capacity When Using the Geometrical Two-Ring Scattering Model	III - 1790
<i>Bjørn Olav Hogstad, Matthias Pätzold, Agder University College, Norway</i>	
Optimisation of Base Station Placement on an Existing UMTS FDD Radio Network	III - 1795
<i>Daniel Sebastião, João Cardeiro, Luís M. Correia, Technical University of Lisbon, Portugal</i>	
Performance Evaluation of Radio Access Selection Procedures in Multi-Radio Access Systems	III - 1800
<i>Alexey Baraev, Ljupco Jorguseski, Remco Litjens, TNO, The Netherlands</i>	
A New Realistic Vehicular Mobility Model for Wireless Networks	III - 1805
<i>Pedro Vieira¹, Manuel Vieira¹, M. Paula Queluz², António Rodrigues³; ¹DEETC/ISEL, Portugal ;</i>	
<i>²Instituto Superior Técnico/IT, Portugal; ³IT/IST/Technical University of Lisbon, Portugal</i>	

Session TM 4 - ORAL Modeling and Simulation II

Chair: Dr. Christian Kloch, Telia Sonera, Denmark

BER Analysis of Equalized OFDM Systems in Sub-Rayleigh Fading	III - 1810
<i>Vanja Subotic, Serguei L. Primak, University of Western Ontario, Canada</i>	
PAPR Reduction of OFDM Signals Using Mobius Transformation for Avoiding Performance Degradation Due to Non Linearity Effects of the Power Amplifier	III - 1815
<i>Joko Suryana, Institut Teknologi Bandung, Indonesia</i>	
Throughput Improvement of IEEE802.11DCF in Cooperation with Shorted NAV Method	III - 1818
<i>Tetsuya Shigeyasu¹, Hiroshi Matsuno², Norihiko Morinaga¹; ¹Hiroshima International University, Japan ; ²Yamaguchi University, Japan</i>	
On Investigation of Nonlinear Amplifier Distortion in OFDM Transmission	III - 1823
<i>Basuki E. Priyanto, Troels B. Sørensen, Ole Kiel Jensen, Aalborg University, Denmark</i>	

Session TA 17 - ORAL Modeling and Simulation III

Chair: Dr. Sudhir Dixit, Nokia Research Center, USA

Coverage Prediction of Cellular MC-CDMA Using a Deterministic Propagation Model	III - 1828
<i>Filippo Giannetti, Paolo Nepa, Aldo N. D'Andrea, Giuliano Manara, University of Pisa, Italy</i>	
Enhanced Modeling of Wireless LAN Inter-Handoff Times	III - 1833
<i>Peter Tabery, Simon Bichler, Christian Hartmann, Munich University of Technology, Germany</i>	
Propagation Modeling for Systems Beyond 3G	III - 1838
<i>Matthias Lott¹, Alexey Vinel², Ying Zhang¹; ¹Siemens, Germany ; ²State University of Aerospace Instrumentation, Russia</i>	
Probabilistic Modelling of Information Propagation in Wireless Mobile Ad-Hoc Networks ...	III - 1843
<i>Henrik Schiøler, Martin B. Hansen, Hans-Peter Schwefel, Aalborg University, Denmark</i>	

Session ThM 4 - ORAL
Modeling and Simulation IV

Chair: Mahbulul Alam, Cisco Systems, USA

- Performance of Space-Time Block Codes in Urban Microcells: The Effect of Antennas III - 1848**
Jari Salo¹, Biljana Badic², Pasi Suvikunnas¹, Hans Weinrichter², Markus Rupp², Pertti Vainikainen¹; ¹Helsinki University of Technology, Finland; ²Vienna University of Technology, Austria
- Performance of WCDMA HSDPA Network with Different Advanced Receiver Penetrations .. III - 1853**
Janne Kurjenniemi¹, Timo Nihtilä¹, Marko Lampinen², Tapani Ristaniemi³; ¹University of Jyväskylä, Finland; ²Nokia, Finland; ³Tampere University of Technology, Finland
- On System Performance of Transmit Diversity in Dedicated Channels of WCDMA III - 1858**
Janne Kurjenniemi¹, Markku Kuusela², Tapani Ristaniemi³; ¹University of Jyväskylä, Finland; ²Nokia Research Center, Finland; ³Tampere University of Technology, Finland
- Performance Evaluation of Bluetooth SCO and ACL Links III - 1863**
Radosveta Sokullu, Engin Karatepe, Ege University, Turkey
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Session ThM 10 - ORAL
Modeling and Simulation V

Chair: Dr. Leonardo Badia, University of Padova, Italy

- Investigations on LCR and ADF for Time Diversity Reception in Mobile Environment III - 1868**
J.S. Roy, T. Sarkar, K. Srivastava, M. Thakur, Birla Institute of Technology, India
- Impact of Cyclic Prefix Length on OFDM System Capacity III - 1871**
Christian Rom¹, Troels B. Sørensen¹, Preben E. Mogensen², Benny Vejlggaard³; ¹Aalborg University, Denmark; ²Aalborg University, Denmark; ³Infineon Technologies, Denmark
- Enhanced Triangulation Method for Positioning of Moving Devices III - 1876**
Guillaume Monghal, Yann Malidor, João Figueiras, Hans-Peter Schwefel, István Zsolt Kovács, Aalborg University, Denmark
- Planning of Large-Scale WLAN Infrastructures III - 1881**
Jovan Stosic¹, Zoran Hadzi-Velkov², Liljana Gavrilovska²; ¹Makedonski Telekomunikacii, Macedonia; ²Ss. Cyril and Methodius University, Macedonia
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Session WM 1 - ORAL
Satellite and Navigation

Chair: Dr. Vinod Kumar, Alcatel, France

- Iterative Carrier Phase Recovery for Turbo-Coded Systems with GMSK Modulation III - 1886**
Zhuo Wu, Alister G. Burr, George White, University of York, U.K.
- Joint Turbo-Decoding and Carrier Phase Estimation for Differentially Encoded OQPSK in Deep Space Communications III - 1891**
Tarannum Reyaz, Alister G. Burr, George White, University of York, U.K.
- An Experiment of Mobile Localization System Using a Low Altitude Stationary Flight Test Vehicle and Array Antennas III - 1895**
Hiroyuki Tsuji, Naoyuki Hirosaki, Hiromi Matsuno, Ryu Miura, NICT, Japan
- Extending Wireless Grids to Remote Locations III - 1900**
Haresh S. Bhatt¹, V.H. Patel¹, K. Bandyopadhyay¹, A.R. Dasgupta¹, Keyurkumar J. Patel²; ¹ISRO, India; ²University of Ballarat, Australia
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Session TM 26 - POSTER
Selected Topics - Poster

Organizers: Technical Program Committee

- Mobile Switching Centre Processing Capacity Computations III - 1905**
Sigit Haryadi, Institut Teknologi Bandung, Indonesia
- Design and Fabrication of Wireless Systems for Pressure Monitoring Systems in Gastro-intestinal Track III - 1910**
Yeon Kwan Moon¹, Ju Gab Lee¹, Jae Jong Ryu¹, Wu Seong Lee¹, Jyung Hyun Lee¹, Chul Ho Won², Jin Ho Cho¹, Jung Hee Lee¹, Hyun Chul Choi¹; ¹Kyungpook National University, Korea; ²Kyungil University, Korea

Driving and Inhibiting Factors for the Adoption of Wireless Handheld Technology in Healthcare Industry	III - 1915
<i>Raj Gururajan¹, Keyurkumar J. Patel²; ¹University of Southern Queensland, Australia ; ²University of Ballarat, Australia</i>	

Session TM 3 - ORAL Selected Topics I

Chair: Prof. Hari Bali, Kingston University, U.K.

Study of Wireless and and Battery-Less High-Speed Communication Module Using Spread Spectrum Modulation	III - 1920
<i>Kazuki Nishioka, Wataru Horie, Yukitoshi Sanada, Keio University, Japan</i>	
Throughput Performance of Contending IEEE 802.11a Systems in Rayleigh Fading Channels	III - 1925
<i>Vladimir Atanasovski, Liljana Gavrilovska, Ss. Cyril and Methodius University, Macedonia</i>	
Eliminating the Communication Black Spots in Future Disaster Recovery Networks	III - 1930
<i>Eliane Bodanese¹, Liljana Gavrilovska², Veselin Rakocevic³, Robert Stewart⁴; ¹Queen Mary University of London, U.K. ; ²Ss. Cyril and Methodius University, Macedonia; ³City University London, U.K.; ⁴Athlone Institute of Technology, Ireland</i>	

Session TM 9 - ORAL Selected Topics II

Chair: Dr. Luis Munóz, University of Cantabria, Spain

Review of Wireless Generations	III - 1935
<i>Kavita Mehta, Dhiraj Pandey, Bharti Vidyapeeth College of Engineering, India</i>	
Mobile Communication and Health Status of Rural Women in Developing Countries: A Case of India	III - 1939
<i>Prahlad Kumar, NULL Nisha, University of Allahabad, India</i>	
Standardisation and Calibration Facilities for Telecommunication Equipment in India	III - 1944
<i>V.R. Singh, National Physical Laboratory, India</i>	

Session TM 12 - ORAL Personal Networks I

Chair: Prof. Torben Larsen, Aalborg University, Denmark

Taking "MAGNET Beyond" — Developing a Wireless Future Addressing User and Business Perspectives	III - 1948
<i>Lene Sørensen, Knud Erik Skouby, Technical University of Denmark, Denmark</i>	
From User Requirements to System Requirements: The MAGNET Approach	III - 1953
<i>Dan Saugstrup, Lene Sørensen, Nette Schultz, Knud Erik Skouby, Henning Olesen, Technical University of Denmark, Denmark</i>	
Developing PN Business Models	III - 1958
<i>Anders Henten, Dan Saugstrup, Technical University of Denmark, Denmark</i>	

Session TA 18 - ORAL Personal Networks II

Chair: Prof. Djamal Zeghlache, GET-INT, France

Enabling Secure Communications Over Heterogeneous Air Interfaces: Building Private Personal Area Networks	III - 1963
<i>Luis Sánchez¹, Jorge Lanza¹, Luis Muñoz¹, Julián Pérez Vila²; ¹University of Cantabria, Spain ; ²Telefónica Investigación y Desarrollo, Spain</i>	
Context Management in Personal Networks	III - 1968
<i>Rasmus Løvenstein Olsen¹, Majid Ghader², Hans-Peter Schwefel¹; ¹Aalborg University, Denmark ; ²University of Surrey, U.K.</i>	
Virtual Router Concept for Communications Between Personal Networks	III - 1973
<i>Wajdi Louati, Djamal Zeghlache, INT, France</i>	
Managing Personal Network Specific Addresses in Naming Schemes	III - 1978
<i>Homare Murakami, Rasmus Løvenstein Olsen, Hans-Peter Schwefel, Ramjee Prasad, Aalborg University, Denmark</i>	

Self-Configuring Private Personal Area Networks: The First Stage Towards Personal Networking	III - 1983
<i>Luis Sánchez, Jorge Lanza, Luis Muñoz, University of Cantabria, Spain</i>	

Session TA 24 - ORAL
Personal Networks III

Chair: Prof. Elvino Sousa, University of Toronto, Canada

MAGNET Secure Service Discovery Architecture	III - 1988
<i>Shahab Mirzadeh¹, Khaled Masmoudi², Yacine Rebahi³, Neeli R. Prasad⁴, Christos Politis¹, Hossam Afifi²; ¹University of Surrey, U.K.; ²INT, France; ³Fraunhofer Fokus, Germany; ⁴Aalborg University, Denmark</i>	
Formal Analysis of a Reputation Based Packet Forwarding Scheme	III - 1993
<i>Anshuman Saxena, Subramanian Sitaraman, Balamuralidhar Purushothaman, Tata Consultancy Services Ltd., India</i>	
A Secure and Lightweight Ad-Hoc Routing Algorithm for Personal Networks	III - 1998
<i>Assed Jehangir, Sonia Heemstra de Groot, University of Twente, The Netherlands</i>	
Combined PHY/MAC Modeling of an Air Interface for Personal Area Networks	III - 2003
<i>Karsten Schoo, Klaus Strohmer, Nokia Research Center, Germany</i>	
UWB Radio Channel Model for Short-Range Mobile-to-Mobile Communication Scenarios	III - 2008
<i>István Zsolt Kovács, Yu Wang, Patrick C.F. Eggers, Kim Olesen, Aalborg University, Denmark</i>	

Session WM 6 - ORAL
Personal Networks IV

Chair: Dr. Sonia Heemstra de Groot, WMC, The Netherlands

IR-UWB Experimental Interference Studies on Selected Legacy Services	III - 2013
<i>Beatriz Quijano, Álvaro Álvarez, Manuel Lobeira, José Luis García, University of Cantabria, Spain</i>	
Impact of Frequency Offsets and IQ Imbalance on MC-CDMA Reception Based on Channel Tracking	III - 2018
<i>François Horlin, Stefaan De Rore, Eduardo Lopez-Estraviz, Frederik Naessens, Liesbet Van der Perre, IMEC, Belgium</i>	
Mapping IST-MAGNET MC-SS Air Interface on the Configurable Baseband SoC of IST-4More: A Case Study	III - 2023
<i>Dominique Noguet, Y. Durand, L. Maret, M. des Noes, CEA, France</i>	
Multiple-Access Interference in FM-UWB Communication Systems	III - 2027
<i>John F.M. Gerrits¹, John R. Farserotu¹, John R. Long²; ¹CSEM, Switzerland; ²Technische Universiteit Delft, The Netherlands</i>	

Session WM 12 - ORAL
Personal Networks V

Chair: Prof. Ignas Niemegeers, Delft University of Technology, The Netherlands

Space-Time Block Coding for Uplink Cyclic Prefix CDMA	III - 2032
<i>François Horlin, Eduardo Lopez-Estraviz, Liesbet Van der Perre, IMEC, Belgium</i>	
Impact and Compensation of Sample Clock Offset on Up-Link Cyclic Prefix CDMA Systems	III - 2037
<i>Stefaan De Rore, François Horlin, Liesbet Van der Perre, IMEC, Belgium</i>	
A Soft-Output Sphere Decoder for MIMO Systems	III - 2042
<i>Zhan Guo, Peter Nilsson, Viktor Öwall, Lund University, Sweden</i>	
A Computational Platform for Real-Time Channel Measurements Using the Capon Beamforming Algorithm	III - 2045
<i>Fredrik Edman, Viktor Öwall, Lund University, Sweden</i>	
Design Considerations for an Integrated Antenna/RF Transceiver for MAGNET HDR Air Interface	III - 2050
<i>Terence E. Dodgson, P. Gardner, Ee Lee, Samsung Electronics (UK) Ltd., U.K.</i>	