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- 790  **Adaptive Minimum Bit Error Rate Receiver for CDMA-Based Block Transmission Systems**  
*(César A. Medina, Tiago T.V. Vinhoza, Raimundo Sampaio-Neto)*






## Poster 3 — Wireless Networks and Applications

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- 795  **Experimental Measurements for VoIP with Network Coding in IEEE 802.11**  
*(I. Lopetegui, R.A. Carrasco, S. Boussakta)*
- 800  **Evaluation of Transport Protocols for SIP Signaling Over IPv6 DVB-RCS Satellite Networks**  
*(M. Ali, L. Liang, Z. Sun, H. Cruickshank)*
- 805  **Evaluation of Interference Avoidance Method Using a Tunable Notch Filter for Impulse Radio UWB (IR-UWB) Systems**  
*(Kenichi Takizawa, Yasuhisa Yamamoto, Keren Li)*
- 810  **Supporting Patient Monitoring Using Activity Recognition with a Smartphone**  
*(Sian Lun Lau, Immanuel König, Klaus David, Baback Parandian, Christine Carius-Düssel, Martin Schultz)*
- 815  **Classification of Digitally Modulated Signals in Presence of Non-Gaussian HF Noise**  
*(Alharbi Hazza, Mobien Shoaib, Alshebeili Saleh, Alturki Fahd)*
- 820  **RF Fingerprint Detection in a Wireless Multipath Channel**  
*(Irwin O. Kennedy, Alexandr M. Kuzminski)*
- 824  **Interference Robustness Measurements for IEEE 802.16e Mobile WiMAX Systems**  
*(Bjoern Dusza, Christian Wietfeld)*
- 829  **WiMAX 54Mbit/s Over Radio Over Fibre Using DCF, SMF Fibre and FGB for Fibre Over 410km**  
*(Mazin Al-Noor, Jonathan Loo, Richard Comley)*
- 834  **Energy Threshold Adaptation Algorithms on Image Compression to Prolong WSN Lifetime**  
*(Phat Nguyen Huu, Vinh Tran-Quang, Takumi Miyoshi)*
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## Error-Control Coding and Iterative Processing

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- 839  **Performance Simulation and Analysis of Alternative Automatic Link Establishment and Link-16/JTIDS Waveforms with Reed Solomon Encoding and Hybrid Soft Decision-Hard Decision Decoding**  
*(Konstantinos Spyridis, Clark Robertson)*
- 844  **Iterative Receivers with Joint Channel and Frequency Offset Estimation in Time-Variant Fading Channels**  
*(Rami N. Khal, Yuriy V. Zakharov)*
- 849  **Performance Analysis of Low Complexity Soft Detection for BICM MIMO System**  
*(Rizwan Ghaffar, Raymond Knopp)*
- 854  **Switched Interleaving Turbo Codes with Transmission of Side Information for Short Blocks**  
*(Rui Fa, Rodrigo C. de Lamare)*
- 859  **Multi Core Implementation of a Trellis Based Syndrome Decoder with Adaptive Complexity**  
*(Klaus Hueske, Jan Geldmacher, Jürgen Götze)*






## Short Range Communications and Sensor Networks

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- 864  **Optimisation of Mobile Indoor Infrared Systems Through Genetic Algorithms**  
*(M. Nikkar Esfahani, Jaafar Elmirghani)*
- 869  **Circuit Aware Design of Power-Efficient Short Range Communication Systems**  
*(Amine Mezghani, Nesrine Damak, Josef A. Nossek)*
- 874  **Combined Spatial-Polarization Correlation Function for Indoor Multipath Environments**  
*(V. Dehghanian, J. Nielsen, G. Lachapelle)*
- 877  **Connectivity Analysis in Power Controlled Decentralized Wireless Networks**  
*(Alberto Zanella, Barbara M. Masini)*
- 882  **Fast Distributed Detection, Localization, and Estimation of a Diffusive Target in Wireless Sensor Networks**  
*(Sami Aldalahmeh, Mounir Ghogho, Ananthram Swami)*
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## Wireless Sensor Networks III

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- 887  **Simple Estimation Method of Radio Propagation by Using CT Images for Implantable Wireless Body Area Networks**  
*(Hiroaki Hagiwara, Kenichi Takizawa, Kiyoshi Hamaguchi)*
- 892  **Energy-Aware Channel Selection for Cognitive Wireless Sensor Networks**  
*(Luca Stabellini)*
- 897  **Analysis and Extension of Benenson's Robust User Authentication Scheme**  
*(Wolfgang Meyer zu Bergsten, Rudolf Mathar)*
- 902  **Receiver Based Interference Protection for MAC Protocol in WSNs**  
*(Jian Qiu, Paul D. Mitchell, David Grace)*
- 907  **A New MAC Solution for Multi-Channel Single Radio in Wireless Sensor Networks**  
*(Carlene E.-A. Campbell, Kok-Keong Loo, Richard Comley)*
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## Adaptive Modulation and Interference Mitigation

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- 912  **A Generalized Subcarrier-Grouped MMSE Based Multi-Stage Interference Cancellation Scheme for OFDMA Uplink Systems with CFOs**  
*(Rui Fa, Li Zhang)*
- 917  **Reduction of Intermodulation Products of Superior Order Generated by Nonlinear Systems Over OFDM Signals Using a Pre-Distortion Technique**  
*(Dick Carrillo)*
- 922  **Reducing the Peak to Average Power Ratio of LDS-OFDM Signals**  
*(Mohammed AL-Imari, Reza Hoshyar)*
- 927  **Generalised Link-Layer Adaptation with Higher-Layer Criteria for Energy-Constrained and Energy-Sufficient Data Terminals**  
*(Virgilio Rodriguez, Rudolf Mathar)*
- 932  **Reducing the Number of Signaling Points Keeping Capacity and Cutoff Rate High**  
*(Anke Schmeink, Rudolf Mathar, Haoqing Zhang)*



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## Equalization, Synchronization and Channel Estimation






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- 937  **A Novel Receiver-Receiver Time Synchronization Scheme for Femtocells**  
(*Jinlin Peng, Li Zhang, D.C. McLernon, Jibo Wei*)
- 941  **An Alternative Multiple Access Scheme for the Uplink 3GPP/LTE Based on OFDM/OQAM**  
(*Mohamed Gharba, Rodolphe Legouable, Pierre Siohan*)
- 946  **Sensitivity of Channel Estimation using B-Splines to Mismatched Doppler Frequency**  
(*Junruo Zhang, Rami N. Khal, Yuriy V. Zakharov*)
- 951  **Timing Synchronization for OFDM Based Spectrum Sharing System**  
(*Pengfei Sun, Li Zhang*)
- 956  **A Channel Estimation Method for MIMO-OFDM Mobile WiMax Systems**  
(*Fabien Delestre, Yichuang Sun*)
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## Spectrum Sensing



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- 961  **Spectrum Sensing with Gaussian Approximated Eigenvalue Ratio Based Detection**  
(*Lu Wei, Olav Tirkkonen*)
- 966  **Outlier Detection Methods of Low SNR Nodes for Cooperative Spectrum Sensing**  
(*Hung Vu Le, Mai Ohta, Kei Inage, Takeo Fujii, Kazushi Muraoka, Masayuki Ariyoshi*)
- 971  **A Spectrum Sensing Algorithm Based on Random Matrix Theory in Cognitive Radio Networks**  
(*Yigang Zhou, Fei Tian*)
- 976  **Distributed and Directional Spectrum Occupancy Measurements in the 2.4GHz ISM Band**  
(*Marja Matinmikko, Miia Mustonen, Marko Höyhty, Tapio Rauma, Heli Sarvanko, Aarne Mämmelä*)
- 981  **Energy-Aware Exploitation of White Spaces in the Time Domain for Wireless Sensor Networks**  
(*Luca Stabellini*)
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## WUN COGCOM 2010 Workshop Opening

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- 986  **Multi-Class Classification of Analog and Digital Signals in Cognitive Radios Using Support Vector Machines**  
(*Marina Petrova, Petri Mähönen, Alfredo Osuna*)
- 991  **An Energy Spreading Technique for Cognitive Radio Networks**  
(*Conor Rochford, Michael Ghizzoni, Matthew Kelley, Richard F. Vaz, Alexander M. Wyglinski, Michael Barry, Sean McGrath*)

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## WUN COGCOM 2010 Dynamic Spectrum Access/Management

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- 996  **A Two-Step Resource Allocation in Multiuser OFDM-Based Cognitive Radio Systems**  
*(Xu Mao, Pengbo Si, Hong Ji, Victor C.M. Leung)*
- 1001  **Cognitive Radio for UWB Spectrum Sharing and Power Allocation**  
*(Ruofan Jin, David Grace, Paul D. Mitchell)*
- 1006  **Spectrum Efficiency Optimization in Multiuser Ultra Wideband Cognitive Radio Networks**  
*(Liaoyuan Zeng, Sean McGrath)*
- 1011  **Generalized Location-Based Resource Allocation for OFDMA Cognitive Radio Systems**  
*(Mahdi Ben Ghorbel, Haewoon Nam, Mohamed-Slim Alouini)*
- 1017  **A Framework for Routing and Channel Allocation in Cognitive Wireless Mesh Networks**  
*(Reza Mossanen Amini, Zbigniew Dziong)*
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## WUN COGCOM 2010 Realisation of Cognitive Radio Networks

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- 1022  **CORAL: A WiFi Based Cognitive Radio Development Platform**  
*(John Sydor)*
- 1026  **Cognitive Radio Test-bed Based on ECMA-392 International Standard**  
*(A. Antony Franklin, JinSuk Pak, HoiYoon Jung, SangWon Kim, SungJin You, JungSun Um, SunMin Lim, GwangZeen Ko, SungHyun Hwang, ByungJang Jeong, MyungSun Song, ChangJoo Kim)*
- 1031  **A Cognitive Radio Realization Based on a Petri Net Approach**  
*(Christian Kocks, Alexander Viessmann, Andreas Waadt, Guido H. Bruck, Peter Jung)*
- 1036  **Spectrum Handoff Reduction for Cognitive Radio Ad Hoc Networks**  
*(Mohamed A. Kalil, Hassan Al-Mahdi, Andreas Mitschele-Thiel)*
- 1041  **Achieving Fairness in Distributed Cognitive Radio Networks Using a Timer Mechanism**  
*(Alireza Attar, Natasha Devroye, Haoming Li, Victor C.M. Leung)*
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## WUN COGCOM 2010 Cognitive Multiple Access and Physical Layers

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- 1046  **Cognitive Radio Multiple Access Control for Unlicensed and Open Spectrum with Reduced Spectrum Sensing Requirements**  
*(Haibin Li, David Grace, Paul D. Mitchell)*
- 1051  **Fast Frequency-Hopping Dynamic Multiple-Access for Cognitive Radios: Noncoherent Interference Cancellation**  
*(Shuo Zhang, Lie-Liang Yang, Youguang Zhang)*
- 1056  **Distributed Selection of Sensing Nodes in Cognitive Radio Networks**  
*(O. Üreten, K.E. Baddour, T.J. Willink)*
- 1061  **Channel and Power Allocation in Cognitive Radio Networks**  
*(Zhuo Wu, Yue Fei)*
- 1066  **On the Capacity of Cognitive Radio Under Limited Channel State Information**  
*(Zouheir Rezki, Mohamed-Slim Alouini)*