2013 7th International Conference on Signal Processing and Communication Systems

(ICSPCS 2013)

Gold Coast, Australia
16-18 December 2013
Keynote Address: Error correction in Quantum Key Distribution

Dr. Sarah Johnson (University of Newcastle, Australia)

Session 1: Wireless Communications 1

1.1. Iterative Interference Alignment Techniques for Broadband Wireless Systems with Limited Feedback
Sara Teodoro (University of Aveiro & Institute of Telecommunications, Portugal); Adão Silva (Instituto de Telecomunicações (IT)/University of Aveiro, Portugal); Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal); Atilio Gameiro (Telecommunications Institute/Aveiro University, Portugal)

1.2. A Simple Downlink Transmission Power Control Method for Worst User Throughput Maximization in Heterogeneous Networks
Tomoyuki Aota (Tokyo University of Science, Japan); Kenichi Higuchi (Tokyo University of Science, Japan)

1.3. Inter-cell Interference Coordination Using Frequency Block Dependent Transmission Power Control and PF Scheduling in Non-orthogonal Access with SIC for Cellular Uplink
Hiromi Katayama (Tokyo University of Science, Japan); Yoshihisa Kishiyama (NTT DOCOMO, INC., Japan); Kenichi Higuchi (Tokyo University of Science, Japan)

1.4. Air-to-ground channel characterization for OFDM communication in C-Band
Christian Bluemm (EADS Innovation Works, Germany); Christoph Heller (EADS Innovation Works, Germany); Bertille Fourestie (Airbus Operations S.A.S., France); Robert Weigel (University of Erlangen-Nuremberg, Germany)
1.5. Fast and robust anchor calibration in range-based wireless localization
Samuel Van de Velde (UGent, Belgium); Patrick Van Torre (Ghent University, Belgium); Heidi Steendam (Ghent University, Belgium)

Session 2: Signal Processing for Multimedia 1

2.1. Unequal Error Protection of H.264/AVC Video Bitstreams based on the Motion Energy Estimation for Group of Pictures
Huu-Dung Pham (Charles Darwin University, Australia); Sina Vafi (Charles Darwin University, Australia)

2.2. Human head detection using histograms of oriented optical flow in low quality videos with occlusion
Fu-Chun Hsu (University of Melbourne, Australia); Jayavardhana Gubbi (The University of Melbourne, Australia); Marimuthu Palaniswami (University of Melbourne, Australia)

2.3. Scene Perception by Context-Aware Dominant Surfaces
Jawad Rafid (Blekinge Institute of Technology, Sweden); Siamak Khatibi (Blekinge Institute of Technology, Sweden)

2.4. Moving Shadow Detection Based on Spatial-Temporal Constancy
Andre Russell (University of Western Sydney, Australia); Ju Jia Zou (University of Western Sydney, Australia)

2.5. A Robust Match Filtering Algorithm for Use with Repetitive Patterns
Christopher Le Brese (University of Western Sydney, Australia); Christopher N Young (University of Western Sydney, Australia); Ju Jia Zou (University of Western Sydney, Australia)

2.6. A wireless video transmission scheme based on network coding and scalable video coding
Dechun Feng (University of Chinese Academy of Sciences, P.R. China); Shaoshuai Gao (University of Chinese Academy of Sciences, P.R. China)

Session 3: Signal Processing for Communications - 1

3.1. Multiple False-targets for Countering ISAR Based on Sub-Nyquist Sampling
Xiaoyi Pan (National University of Defense Technology, P.R. China); Qixiang Fu (University of Defense Technology, P.R. China); Wei Wang (University of Defense Technology, P.R. China); Dejun Feng (University of Defense Technology, P.R. China); Guoyu Wang (University of Defense Technology, P.R. China)

3.2. Comparison of Spherical Harmonics based 3D-HRTF Functional Models
Rodney Andrew Kennedy (The Australian National University, Australia); Wen Zhang (Australian National University, Australia); Thushara D. Abhayapala (Australian National University, Australia)
3.3. Measurements and Characterizations of Spatial and Temporal TOA Based Ranging for Indoor WLAN Channels
Ebtesam Almazrouei (Khalifa University, UAE); Nayef Alsindi (Etisalat-British Telecommunications Innovation Centre (EBTIC), UAE); Saleh Al-Araji (Khalifa University of Science, Technology and Research, UAE); Nazar Ali (Khalifa University, UAE); Zdenek Chaloupka (Etisalat British Telecom Innovation Centre, UAE); James Aweya (Etisalat British Telecom Innovation Center/Khalifa University, UAE)

3.4. Spatial Correlation from Multipath with 3D Power Distributions having Rotational Symmetry
Rodney Andrew Kennedy (The Australian National University, Australia); Zubair Khalid (The Australian National University, Australia); Yibeltal Fantahun Alem (The Australian National University, Australia)

3.5. Detection by Inherent Channel Estimation in Rapidly Fading Channels
Jan Lewandowsky (University of Federal Armed Forces Munich, Germany); Stephan Ludwig (University of Federal Armed Forces Munich, Germany); Berthold Lankl (University of Federal Armed Forces Munich, Germany)

3.6. An Empirical Study on Call Arrivals in Cellular Networks: Incoming and Outgoing Calls
Saliha Büyükçorak (Istanbul Technical University, Electrical and Electronics Engineering Faculty, Turkey); Gunes Karabulut Kurt (Istanbul Technical University, Turkey); Güven Toprakkıran (Istanbul Technical University, Electrical and Electronics Engineering Faculty, Turkey)

Session 4: Wireless Communications - 2

4.1. Measurement and Time Dispersion Analysis of UWB Channels for Infostation Application in an Outdoor Recreation Park
Uche Kennedy Okonkwo (Universiti Teknologi Malaysia, Malaysia); Razali Ngah (Universiti Teknologi Malaysia, Malaysia); Solomon Nunoo (Universiti Teknologi Malaysia & University of Mines and Technology, Malaysia); Yasser K. Zahedi (Universiti Teknologi Malaysia, Malaysia); Tharek Abdul Rahman (Wireless Communication Centre, Malaysia); Chollette C. Chude-Olisah (Universiti Teknologi Malaysia, Malaysia); Ahmed Al-Sammad (Universiti Teknologi Malaysia, Malaysia)

4.2. Base Station Cooperative Multiuser MIMO Using Block-diagonalized Random Beamforming with Online Update
Nobuhide Nonaka (Tokyo University of Science, Japan); Anass Benjebbour (NTT DoCoMo, Inc., Japan); Kenichi Higuchi (Tokyo University of Science, Japan)

4.3. Delay Properties in Non-Orthogonal Spectrum Sharing with Adaptively Rate Controlled Selfish Dynamic Spectrum Control
Tatsuki Okuyama (Osaka University, Japan); Shinsuke Ibi (Osaka University, Japan); Seiichi Sampei (Osaka University, Japan)
4.4. On the Effects of Spreading Sequences over MIMO Systems

Tianle Liu (University of Wollongong, Australia); David Stirling (University of Wollongong, Australia); Peter J Vial (University of Wollongong, Australia); Tadeusz A. Wysocki (University of Nebraska-Lincoln, USA); Beata Wysocki (University of Nebraska-Lincoln, USA); Le Chung Tran (University of Wollongong, Australia); Prashan Premaratne (University of Wollongong, Australia)

4.5. Joint Design of User Power Allocation and Relay Beamforming in Two-Way MIMO Relay Networks

Ha H Kha (Ho Chi Minh City University of Technology, Vietnam); Hoang D. Tuan (University of Technology, Sydney, Australia); Ha Nguyen (University of Saskatchewan, Canada); Tam Ho (University of Technology, Sydney, Australia)

4.6. A QoS provisioning MAC protocol for Cognitive Radio Network

Vishram Mishra (Nanyang Technological University, Singapore); C. T. Lau (Nanyang Technological University, Singapore); Syin Chan (Nanyang Technological University, Singapore)

Session 5: Communications Theory

5.1. A Robust Acquisition Architecture for GPS Safety-of-Life L5 Signal

Tu Nguyen (Hanoi University of Science and Technology, Vietnam); Ta Hai Tung (Hanoi University of Science and Technology, Vietnam)

5.2. Adaptable N-gram Classification Model for Data Leakage Prevention

Sultan Alneyadi (Griffith University, Australia)

5.3. A Spatiotemporal Clustering Approach to Maritime Domain Awareness

Kristofer Tester (Naval Postgraduate School, USA); James Scrofani (Naval Postgraduate School, USA); Murali Tummala (Naval Postgraduate School, USA); David A. Garren (Naval Postgraduate School, USA); John C. McEachen (Naval Postgraduate School, USA)

Session 6: Networks and Protocols

6.1. A Novel Scheduling Technique for Smart Grid Data on LTE Networks

Chalakorn Karupongsiri (The University of Sydney, Australia); Md. Farhad Hossain (The University of Sydney, Australia); Kumudu S Munasinghe (University of Canberra, Australia); Abbas Jamalipour (University of Sydney, Australia)

6.2. An Efficient Proactive Route Maintenance Process for Reliable Data Transmissions in Sensor Networks

Lapas Pradittasnee (Queensland University of Technology, Australia); Yu-Chu Tian (Queensland University of Technology, Australia); Anaglyaddage D. S. Jayalath (Queensland University of Technology, Australia); Seyit A. Camtepe (Queensland University of Technology & Science and Engineering Faculty, Australia)
6.3. Advanced MOS calculation for network based QoE Estimation of TCP streamed Video Services
Marcus Eckert (Chemnitz University of Technology, Germany); Thomas Martin Knoll (Chemnitz University of Technology, Germany); Florian Schlegel (Chemnitz University of Technology, Germany)

6.4. SEA-BAN: Semi-Autonomous Adaptive Routing in Wireless Body Area Networks
Md. Tanvir Ishtaique ul Huque (University of Sydney, Australia); Kumudu S Munasinghe (University of Canberra, Australia); Mehran Abolhasan (University of Technology Sydney, Australia); Abbas Jamalipour (University of Sydney, Australia)

6.5. An Adaptive delay-based Power Control and Routing Scheme
Ke Wang (National University of Singapore, Singapore); Wai-Choong Wong (National University of Singapore, Singapore); Teck Yoong Chai (Institute for Infocomm Research, Singapore)

6.6. A Novel Network Simulator based on Stochastic Spatial Models
Andrey Skrebtsov (Universität Duisburg-Essen, Germany); Zijian Bai (University of Duisburg-Essen, Germany); Guido Bruck (University of Duisburg Essen, Germany); Peter Jung (Universität Duisburg-Essen, Germany)

Session 7: Signal Processing for Communications - 2

7.1. Decision-directed Estimation of Phase Noise in Iterative Frequency-domain Equalization Schemes
Pedro Pedrosa (Instituto de Telecomunicações - Lisboa & Instituto Superior Tecnico, Portugal); Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal); Fernando Nunes (Instituto Superior Tecnico, Portugal); António J. Rodrigues (IT / Instituto Superior Técnico, Portugal)

7.2. Model-Based Implementation for the Calculation of Power Spectral Density in an FPGA System
Steffen Riess (University of Erlangen-Nuremberg, Germany); Johannes Brendel (University of Erlangen-Nuremberg, Germany); Georg Fischer (University of Erlangen-Nuremberg & Eesy-id, Germany)

7.3. Throughput Optimization of Precoded OFDM with Hierarchical Modulation
Belkacem Mouhouche (Samsung Electronics Research and Development UK, United Kingdom); Alain Mourad (Samsung Electronics Research Institute, United Kingdom); Daniel Ansorregui (Samsung Research UK, United Kingdom)

7.4. Asymptotic Analysis of Precoded OFDM with Hierarchical Modulation
Belkacem Mouhouche (Samsung Electronics Research and Development UK, United Kingdom); Alain Mourad (Samsung Electronics Research Institute, United Kingdom); Daniel Ansorregui (Samsung Research UK, United Kingdom)
7.5. Optimization of Multiple-Channel Cooperative Spectrum Sensing in Rayleigh Fading Environment

Xiaoxiao Zhang (University of Electronic Science and Technology of China, P.R. China); WanBin Tang (University of Electronic Science & Technology of China, P.R. China); Huogen Yu (University of Electronic Science and Technology of China, P.R. China); Shaoqian Li (University of Electronic Science and Technology of China, P.R. China)

7.6. Late-Time Resonance Window Estimation in Radar

Chad Hargrave (CSIRO, Australia); Vaughan Clarkson (The University of Queensland, Australia); Hoi-Shun Lui (The University of Queensland, Australia)

Session 8: Implementations and Development

8.1. Satellite Transmitter Position Constraints for Zero, One and Two Solutions

Megan Dawson (The University of Queensland, Australia); Vaughan Clarkson (The University of Queensland, Australia)

8.2. Autonomous Vehicle Guidance System with Infrastructure

Kyungbok Sung (ETRI, Korea); Kyoungwook Min (ETRI, Korea); JuWan Kim (ETRI, Korea); Jeong-Dan Choi (Electronics and Telecommunications Research Institute, Korea)

8.3. On the development of a partial update multichannel nonlinear active noise control system

Nithin V George (IIT Gandhinagar, India); Ganapati Panda (Indian Institute of Technology Bhubaneswar, India); Vikash Kumar (NIT Rourkela, India)

8.4. A Configurable Fingerprint-Based Hidden-Markov Model for Tracking in Variable Channel Conditions

John Roth (United States Naval Academy, USA); Murali Tummala (Naval Postgraduate School, USA); John C. McEachen (Naval Postgraduate School, USA); James Scrofani (Naval Postgraduate School, USA)

8.5. Evaluation of Caustics for Parabolic Reflector Antennas through Focal Region Ray Tracings

Nurul Huda Abd Rahman (Universiti Kebangsaan Malaysia, Malaysia); Mohammad Tariqul Islam (Institute of Space Science (ANGKASA) & Universiti Kebangsaan Malaysia, Malaysia); Norbahiah Misran (UKM, Malaysia); Yoshihide Yamada (National Defense Academy, Japan); Naobumi Michishita (National Defense Academy, Japan)

Session 9: Wireless Communications - 3

9.1. Cognitive Relay Nodes for Airborne LTE Emergency Networks

Akram Al-Hourani (RMIT University, Australia); Sithamprananathan Kandeepan (RMIT University, Australia)
Arnav Mohan (Indian Institute of Technology Delhi, India); Shankar Prakriya (Indian Institute of Technology, Delhi, India)

9.3. Power Allocation of Distributed Space-Frequency Coding for OFDM-based Hybrid Relay Selection
Ibrahim Sileh (USQ, Australia); Andrew Maxwell (University of Southern Queensland, Australia); Wei Xiang (University of Southern Queensland, Australia)

9.4. Outage Performance Analysis of Cognitive Relay Networks with BRS and MMRS
Louis Sibomana (Blekinge Institute of Technology, Sweden); Charles Kabiri (Blekinge Institute of Technology, Sweden); Hans-Juergen Zepernick (Blekinge Institute of Technology, Sweden); Hung Tran (National Institute of Education Management, Vietnam)

Session 10: Signal Processing for Communications - 3

10.1. Non-Decision-Aided Detection and SNR Estimation of Weak BPSK Signals in AWGN
Garry N Newsam (Defence Science and Technology Organisation, Australia); Michelle Chamalaun (Defence Science and Technology Organisation, Australia)

10.2. Communications Network Utility as a Function of Node Entropy
Jason Q McClintic (US Navy Ship Repair Facility--Japan Regional Maintenance Center, Japan); Murali Tummala (Naval Postgraduate School, USA); John C. McCleach (Naval Postgraduate School, USA); James Scrofani (Naval Postgraduate School, USA)

10.3. Long Range Parametric Channel Prediction for Narrowband MIMO Systems with Joint Parameter Estimation
Ramon O. Adeogun (Victoria University of Wellington, New Zealand); Pawel A. Dmochowski (Victoria University of Wellington, New Zealand); Paul D Teal (Victoria University of Wellington, New Zealand)

10.4. Sparse Recovery of Spherical Harmonic Expansions from Uniform Distribution on Sphere
Yibeltal Fantahun Alem (The Australian National University, Australia); S. M. Akramus Salehin (Australian National University, Australia); Daniel H. Chae (The Australian National University, Australia); Rodney Andrew Kennedy (The Australian National University, Australia)

10.5. Performance comparison of multipath detection using early late phase in BPSK and BOC modulated signals
Omer M Mubarak (Iqra University, Pakistan)

Poster Session 1: Communication Systems 1

P1.1. Joint Interference Alignment and IB-DFE scheme for MC-CDMA Systems
Adão Silva (Instituto de Telecomunicações (IT)/University of Aveiro, Portugal); Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal); José Moreira (Instituto de Telecomunicacoes, Portugal); Atilio Gameiro (Telecommunications Institute/Aveiro University, Portugal)
P1.2. An Efficient Channel Estimation and Tracking Technique for Single Frequency Networks with SC-FDE Modulations
Fabio Silva (Instituto de Telecomunicações & Universidade Nova de Lisboa, Portugal); Rui Dinis (Instituto de Telecomunicacoes & FCT-UNL, Portugal); Paulo Montezuma (FCT-UNL, Portugal)

P1.3. The Utilization of Neural Networks to Radiation Pattern of Microstrip Antenna Formation
Marian Wnuk (Military University of Technology, Poland); Marek Bugaj (Military University of Technology, Poland); Leszek Nowosielski (Military University of Technology, Poland)

P1.4. Robust Far-end Channel Estimation Design for MIMO Relay Systems
Fan-Shuo Tseng (National Sun Yat-sen University, Taiwan); Wan-Jen Huang (National Sun Yat-Sen University, Taiwan); Wen-Rong Wu (National Chiao Tung University, Taiwan)

P1.5. Deploying Unlicensed Wireless Technologies For The Smart Grid: The Co-existence Issue
Mirza Baig (Royal Melbourne Institute of Technology, Australia); Sithamparanathan Kandeepan (RMIT University, Australia); Grahame Holmes (RMIT University, Australia)

P1.6. A Convolutional Coded XOR Physical Layer Network Coding with Unitary Precoding in Wireless Bidirectional Relay Networks
Satoshi Denno (Okayama University, Japan); Daisuke Umehara (Kyoto Institute of Technology, Japan)

P1.7. Inter-cell Interference Coordination Using Coordinated Inter-cell Interference Power Control in Uplink
Kenichi Higuchi (Tokyo University of Science, Japan); Yoshiko Saito (Panasonic Corporation, Japan); Seigo Nakao (Panasonic Corporation, Japan)

P1.8. Robust Transceiver Based on Worst-Case SINR Optimization for MIMO Interfering Broadcast Channels with Imperfect Channel Knowledge
Hyun-Ho Lee (LG Electronics, Korea); Young-Chai Ko (Korea University, Korea); Jun Heo (Korea University, Korea); Soo-Won Kim (Korea University, Korea); Chulwoo Kim (Korea university, Korea)

P1.9. Effects of Base Matrices on Iterative Decoding Performance of Irregular QC-LDPC Codes
Sheng Tong (Xidian University, P.R. China); Qinghua Guo (University of Wollongong, Australia); Jiangtao Xi (University of Wollongong, Australia); Yanguang Yu (University of Wollongong, Australia)
P1.10. Optimized Linear Precoder in MIMO Interference Channel using D.C. Programming
Tam Ho (University of Technology, Sydney, Australia); Enlong Che (University of Technology, Sydney, Australia); Hoang D. Tuan (University of Technology, Sydney, Australia)

P1.11. Single Symbol Decodable QO-STBC with Full Diversity
Naotoshi Yoda (Keio University, Japan); Wenjian Wang (Chiba University, Japan); Chang-Jun Ahn (Chiba University, Japan)

P1.12. The Effect of Time-Reversal Filter on UWB-IR Communications
Zhenyang He (The University of Kitakyushu, Japan); Ryohei Nakamura (The University of Kitakyushu, Japan); Akihiro Kajiwara (University of Kitakyushu, Japan)

P1.13. A Link Quality Indicator for analog FM Transmission Systems
Johannes Brendel (University of Erlangen-Nuremberg, Germany); Axel Schmidt (Sennheiser Electronic GmbH & Co. KG, Germany); Georg Fischer (University of Erlangen-Nuremberg & Eesy-id, Germany)

P1.14. OFCDM-based Precise Time Measurement and Its Performance under Gaussian Channel
Gao Kai (National University of Defence Technology, P.R. China); Zhou Ziwei (NUDT, P.R. China); Jianbin Zou (National University of Defense Technology, P.R. China); Zhang Wei (NUDT, P.R. China)

Poster Session 2: Signal Processing

P2.1. Interpolating Leaf Quad Tree Image Compression
Luke Lincoln (Griffith University, Australia); Ruben Gonzalez (Griffith University, Australia)

P2.2. Embedded Door Access Control Systems Based on Face Recognition: A Survey
Qasim Alshebani (University of Wollongong, Australia); Prashan Premaratne (University of Wollongong, Australia); Peter J Vial (University of Wollongong, Australia)

P2.3. Fourier Based Recovery of Anisotropic Scaling Parameters in Images
Ruben Gonzalez (Griffith University, Australia)

P2.4. A Robust Region-based Global Camera Estimation Method for Video Sequences
Xuesong Le (Griffith University, Australia); Ruben Gonzalez (Griffith University, Australia)

P2.5. Measuring Depth Accuracy in RGBD Cameras
Hussein Haggag (Deakin University - Australia, Australia); Mohammed Hossny (Deakin University & Institute for Technology Research and Innovation, Australia); Despina Filippidis (Defence Science and Technology Organisation, Australia); Doug Creighton
P2.6. Simultaneous Gain, Drift and Offset Estimation in Measurement Systems using Coherent Sampling

John Leis (University of Southern Queensland, Australia)

P2.7. Affine Invariant Matching Based on Orientation Estimation

Christopher Le Brese (University of Western Sydney, Australia); Ju Jia Zou (University of Western Sydney, Australia)

P2.8. Edge-based Representation and Recognition for Surgically Altered Face Images

Chollette C. Chude-Olisah (Universiti Teknologi Malaysia, Malaysia); Ghazali Bin Sulong (Universiti Teknologi Malaysia, Malaysia); Uche Kennedy Okonkwo (Universiti Teknologi Malaysia, Malaysia); Siti Zaiton Mohd Hashim (Universiti Teknologi Malaysia, Malaysia)

P2.9. COTS Embedded Internet Platform and Blimp UAV for Educational Purposes

Matthew J.A. D'Souza (The University of Queensland, Australia); Adam Postula (University of Queensland, Australia); Konstanty S Bialkowski (The University of Queensland & National ICT Australia, Australia); Mark Schulz (The University of Queensland & Centre for Educational Innovation and Technology, Australia)

P2.10. A Conceptual Foundation of NSCW Transport Design Using an MMT Standard

Takayuki Nakachi (NTT, Japan); Yoshihide Tonomura (NTT, Japan); Tatsuya Fujii (NTT Network Innovation Laboratories, Japan)

P2.11. REAPER: Rapid Evolutionary Algorithm Prototyping and Experiment Reporting

Christopher N Young (University of Western Sydney, Australia); Ju Jia Zou (University of Western Sydney, Australia); Chin Leo (University of Western Sydney, Australia)

P2.12. Infrastructure based Vehicle Recognition System with multi sensor fusion

Sangheon Park (ETRI, Korea); Jeong Ah Jang (ETRI, Korea); JuWan Kim (ETRI, Korea)


Abderrazek Abdaoui (Qatar University & College of Engineering, Qatar); Tarek M. Elfouly (Qatar University, Qatar)


Sarankumar Balakrishnan (National University of Singapore, Singapore); Lay Teen Ong (National University of Singapore, Singapore)
Poster Session 3: Communication Systems 2

P3.1. **Source Localization and Tracking in a Cognitive Radio Environment Consisting of Frequency and Spatial Mobility**
Agur Adams (Naval Postgraduate School & United States Naval Academy, USA); Murali Tummala (Naval Postgraduate School, USA); John C. McEachen (Naval Postgraduate School, USA); James Scrofani (Naval Postgraduate School, USA)

P3.2. **Performance Analysis of a Time Headway Based Rate Control Algorithm for VANET Safety Applications**
Muhammad Awais Javed (University of Newcastle, Australia); Jamil Y Khan (The University of Newcastle, Australia)

P3.3. **Two-Stage Scheme for Geolocation using Mobile Sensor Networks with Optimal Formations**
Tan Ngo (Naval Postgraduate School, USA); Murali Tummala (Naval Postgraduate School, USA); John C. McEachen (Naval Postgraduate School, USA); James Scrofani (Naval Postgraduate School, USA)

P3.4. **A Compact Ultra Wideband Antenna with Dual Band-Notched Design**
Yanti Erana Jalil (Universiti Tenaga Nasional, Malaysia); Baskaran Kasi (Universiti Infrastruktur Kuala Lumpur, Malaysia); Chandan Chakrabarty (Universiti Tenaga Nasional, Malaysia)

P3.5. **Constant-Amplitude Signaling for an Extended Parallel Combinatory Multicode System and Improvement of its BER**
Tatsuya Ohta (Graduate School of Engineering Shizuoka University, Japan); Kouji Ohuchi (Shizuoka University, Japan)

P3.6. **A Packet Age Based LTE Uplink Packet Scheduler for M2M Traffic**
Nusrat Afrin (University of Newcastle, Australia); Jason Brown (University of Newcastle, Australia); Jamil Y Khan (The University of Newcastle, Australia)

P3.7. **Full-Diversity Partial Interference Cancellation for Multi-User Wireless Relaying Networks**
Mohammed-Taha O. El Astal (University of Tasmania, Australia); Amr Ismail (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Jan Corne Olivier (University of Tasmania, Australia)

Tatsuji Miyamoto (Mie University, Japan); Katsuhiko Naito (Mie University, Japan); Kazuo Mori (Mie University, Japan); Hideo Kobayashi (Mie University, Japan)
Md. Tanvir Ishtaique ul Huque (University of Sydney, Australia); Kumudu S Munasinghe (University of Canberra, Australia); Mehran Abolhasan (University of Technology Sydney, Australia); Abbas Jamalipour (University of Sydney, Australia)

P3.10. **A Modified CA-CFAR Method For LTE Random Access Detection**
Felipe Augusto de Figueiredo (CPqD & CPqD, Brazil); João Paulo Miranda (CPqD, Brazil); Fabbryccio A. Cardoso (CPqD, Brazil); Karlo Lenzi (Unicamp, Brazil); José A. Bianco, Filho (UNICAMP, Brazil); Fabricio L Figueiredo (CPqD Telecom and IT Solutions, Brazil)

P3.11. **Flag Dual Amplitude Pulse Position Modulation for Atmospheric FSO Communications**
Aiping Huang (the University of New South Wales & Australia, Australia); Jinhong Yuan (University of New South Wales, Australia); Yangyu Fan (Northwestern Polytechnical University, P.R. China); Tao Linwei (Northwestern Polytechnical University, P.R. China)

Husna Zainol Abidin (Universiti Teknologi MARA, Malaysia); Norashidah Din (Universiti Tenaga Nasional, Malaysia); Yanti Erana Jalil (Universiti Tenaga Nasional, Malaysia)

P3.13. **An Iteratively Tuned Fuzzy Logic Movement Model in WSN Using Particle Swarm Optimization**
Ali Rafiei (University of Technology Sydney, Australia); Yashar Maali (University of Technology Sydney, Australia); Mehran Abolhasan (University of Technology Sydney, Australia); Daniel R Franklin (University of Technology, Sydney, Australia); Stephen Smith (Macquarie University, Australia)

List of Authors