2013 19th Asia-Pacific Conference on Communications

(APCC 2013)

Bali, Indonesia 29 – 31 August 2013



IEEE Catalog Number: ISBN:

Number: CFP13790-POD 978-1-4673-6049-4

TABLE OF CONTENTS

The 19th Asia Pacific Conference on Communications 2013 (APCC 2013)

29-31 August 2013 BALI- INDONESIA

		Page number
1569763855	Rate Optimization Under Amplify-and-Forward Based Cooperation with Single Eavesdropper	1
1569764983	Mitigated Deep Faded Channel with Relay Node Allocation for MUDiv/OFDMA	6
1569765003	On Improving Capacity and Delay in Multi Tx/Rx Wireless Mesh Networks with Weighted Links	12
1569765409	Dual-band FSK Modulation Scheme for Narrowband Emergency Broadcast Systems	18
1569765615	A Fine Timing Synchronization Method on Group Communication System Enablers for LTE	21
1569762585	A Low Complexity, Medium Data Rate, Ultra-wideband Communication Method and System	26
1569720983	An Enhanced-Decode-and-Forward (E-DF) Relaying Protocol Over Quasi- Static Flat Fading Channel	N/A
1569744309	Speaker Identification Based on Sparse Subspace Model	37
1569763071	Analysis of Correlation Phase Algorithm for Adaptive Filters in Digital QAM Systems	42
1569764081	MMSE Filtering for Amplify & Forward SIMO Multiple Access Channel with Ill-conditioned Second Hop	48
1569765019	MIMO-Type Current-Mode Multifunction Biquadratic Filter Using a MCDTA	54
1569765121	Throughput Performance Enhancement Applying Adaptive Modulation for Single Symbol Decodable QO-STBC with Full Diversity	58
1569765443	Performance Analysis of CCK- OFDM Over Fading Channel	63
1569754411	On the Effects of Energy-Aware Traffic Engineering on Routing Reliability	69
1569762907	A Multi-objective Service Selection Algorithm for Service Composition	75
1569765139	Resilient Multi-layer Network Designs and Evaluations	81
1569765255	Virtual Network Designs and Evaluations for IP Over WDM Networks	87
1569765363	Proposal for Ultra-High Speed Scheduling Architecture	92
1569765425	Trust-based SPIT Detection by Using Call Duration and Social Reliability	98
1569778179	QoS-aware Routing for Transmission of H.264/SVC Encoded Video Traffic Over MANETs	104
1569754083	Energy-efficient and Mobility-aware MAC Protocol for Wireless Sensor Networks	110

1569757951	Enabling Commodity Environmental Sensor Networks Using Multi- Attribute Combinatorial Marketplaces	115
1569764009	A Time Synchronization Protocol Based on Dynamic Route List for Wireless Sensor Networks	121
1569765493	Co-channel Operation of Microwave Power and IEEE 802.11-based Data	127
1569746567	Transmissions: A Feasibility Study Distributed Multi-Sensor Tracking in Wireless Networks Using	132
1569764491	Nonparametric Variant of Sum-Product Algorithm Position Paper: Design Concept of Ad-hoc Information Network System	138
1569764619	for Disaster Mitigation TCP Incast Avoidance Based on Connection Serialization in Data Center	142
1569764973	Networks Joint Relay Selection and Power Allocation in AF-OFDMA Two-Way Relay	N/A
1569765025	Systems Beacon-Less Broadcast Protocol for Vehicular Ad Hoc Networks	153
1569765041	Majority Decision Sensor Networks Composed of Binary Tree Fading Links	155
1569766103	Robustness Evaluation of Positioning Scheme Using Electrode Array for	160
1569766215	Sheet Medium Communication Sensor Network Cell Based Clustering Scheme Considering Dynamic Network Topology in	166
1569774253	Wireless Sensor Networks An Opportunistic Message Forwarding Protocol for Underwater Acoustic	172
1569774921	Sensor Networks Implementation and Evaluation of Token-Scheduled Collection Protocol in Wireless Sensor Network	178
1569764981	Cache Replacement Strategies for Scalable Video Streaming in CCN	184
1569765185	Video Streaming Over MANETs: Testing and Analysis Using Real-Time Emulation	190
1569765499	Holistic Network Selection Using Dynamic Weights to Achieve Personalized ABC	196
1569766063	Co-Channel Interference Avoidance in Two-Tier LTE Femtocell Systems Using Control Information	202
1569766121	Empirical Analysis of Different Hierarchical Addressing Deployments	208
1569766301	Applying Proximity Rank Join Model Into Location-Based Services	214
1569765691	Microwave Power and Data Transmission Scheduling for IEEE 802.11- based Wireless Network with Enormous Numbers of Sensors	220
1569766247	A Sampling Theorem for Periodic Functions with No Minus Frequency	225
1569772973	Component and Its Application Proposal of PAPR Reduction Method for OFDM Signal by Re-Ordering of	231
1569773009	Clusters Carrier Aggregation with Per-CC Based Different Antenna Tilting in LTE- Advanced	237
1569773667	A Carrier Frequency Synchronization Method for Device-to-Device Communication Network	239
1569774711	An Improved Combinatorial Algorithm for Wireless Information Flow	N/A

1569766371	EAS+: A Unified Event Processing Framework for Component-Based Network Management System	250
1569766463	Cost Reduction Evaluation of Sharing Backup Servers in Inter-cloud	256
1569772963	Minimum Power Consumption of a Base Station with Large-scale Antenna Array	262
1569774895	Design of Energy-Efficient Logical Topology with Low Reconfiguration Overhead in Optical Networks	N/A
1569775109	Dynamic Age-Adjusted Cooperative Caching in Content Centric Networks	N/A
1569776959	A LabVIEW-based Real-time Measurement System for Polarization Detection and Calibration	N/A
1569765673	Using Chip Interleaving to Improve Chaos-based Code Tracking Performance	283
1569765785	EXIT-chart-based Threshold Calculation of LDPC Code in 2D ISI Channels	287
1569765825	Achievable Rate Improvement Through Channel Prediction for Interference Alignment	293
1569766579	Linearly Distributed Antenna Diversity Using Single Frequency Network for High-Speed Railway Communications	299
1569770183	Design and Realization of Archimedes Spiral Antenna for Radar Detector At 2-18 GHz Frequencies	304
1569765149	Multiple-CSI Selection Methods for CoMP Downlink	310
1569765753	Energy-efficiency MBMS Single Frequency Networks with User Cooperation	315
1569765893	A REST-Based Publish/Subscribe Platform to Support Things-to-Services Communications	321
1569765947	Stentorian MAC: Enhance Concurrency in Underwater Acoustic Sensor Networks	327
1569766157	Trustability Based on Beta Distribution Detecting Abnormal Behaviour Nodes in WSN	333
1569766245	Indoor Trace Tracking Algorithm with Pattern-based Positioning Technique of UHF Band RFID	339
1569765663	An Intrusion Detection Game in Access Control System for the M2M Local Cloud Platform	345
1569765735	Integrated Dynamic Bandwidth Allocation Considering Overhead in Passive Optical Network	351
1569766131	An Efficient One-To-Many Content Distribution Method for Wi-Fi Networks	356
1569766221	Proposal of Scale-out Control Architecture of Virtual Wide Area Layer-2 Switch on Metro Network	362
1569766375	Performance Analysis of Dynamic Burst Mapping in WiMAX System	368
1569766485	OSNR Monitoring for PDM RZ-DQPSK System by Low Bandwidth Sampling Technique	373
1569766053	SNR Wall for Generalized Energy Detection Under Noise Uncertainty in Cognitive Radio	375
1569766445	A Novel Spectrum Sensing Scheme Using Clock Timing Extraction Based Feature Detection	381

1569774731	A Novel Scheme for Performing Wireless Distributed Computing with Strip Spectral Correlation Algorithm	387
1569775645	Optimization of Cooperative Spectrum Sensing Under Noise Uncertainty	393
1569778205	Evaluation of Influence of IP QoS Degradation on Web-QoE by Severity Rating Method	398
1569777949	Utility Optimal Scheduling in Energy Cooperation Networks Powered by Renewable Energy	403
1569778313	Tree-based Disaster Recovery Multihop Access Network	409
1569766081	A Greedy Data Matching for Vehicular Localization with Temporal-Spatial Weighting Factors	415
1569777485	Extended Communication Interface for Remote Vehicle Diagnosis Using Internet Protocol	421
1569777867	The Multiple-Key Blom's Scheme for Key Establishment in Mobile Ad Hoc Sensor Networks	427
1569777871	A Reroute Method Using Multiple Routing Configurations for Fast IP Network Recovery	433
1569774067	CARE: Coverage-Aware Connectivity Restoration Algorithm for Mobile Actor/Robot Networks	439
1569765445	A Complexity-Efficient Human Body Communications	445
1569774429	A Game-Theoretic Framework for Joint Base Station and Resource Selection in LTE Heterogeneous Networks	447
1569710741	A Generalized Spatial Correlation Approximation Under Arbitrary AoA Scenarios	453
1569765685	A Greedy Algorithm for Connection Admission Control in Wireless Random Access Networks	456
1569773087	A Fast Convergence and Area-Efficient Decoder for Quasi-Cyclic Low- Density Parity-Check Codes	458
1569765881	A Message Passing Algorithm for Compressed Sensing in Wireless Random Access Networks	463
1569774951	A Multi-Level Error Protection Technique Based on Macroblocks' Importance of the H.264/AVC Video Frames	465
1569753535	A Novel Interference Suppression Method Using DFT in DS/CDMA Communication Systems	471
1569774877	A Novel Internal Collision Managing Mechanism of IEEE 802.11e EDCA	473
1569765089	An Innovative Hearing System Utilizing the Human Body as a Transmission Medium	479
1569765463	Combined Optimization Scheme for Degree Distributions of LDPC Codes	485
1569773627	Comparison of Discrete Multi-Tone and Pulse Amplitude Modulation Under Different Distortions for 100Gb/s System	490
1569760011	Controlling Coverage for Indoor Wireless Networks Using Metalized Active FSS Walls	496
1569774835	Cost Comparison of Different ROADM Architectures	501
1569778123	Error Analysis and Experimental Study on Indoor UWB TDoA Localization with Reference Tag	505

1569783729	Multi-Delay Multi-Dropout Model of M2M Data Network for Networked Control System	509
1569774973	Bounds on the Expected Rank of Sparse Linear Operator Channel Matrices	514
1569775119	On Some Algorithms on the Proposed Lower Bound of the Designed Minimum Distance for Cyclic Codes	520
1569776631	Power Provision Scheme Considering Shadowing Effect for Two- Dimensional Communication Systems	525
1569777611	Multigigabit Balanced Add-Select-Register-Compare Viterbi Decoders Architecture in 60 GHz WPAN	531
1569778369	A Novel Conjugate Gradient Algorithm Based NBI Suppression in Chirp UWB System	536
1569765777	Power Allocation in Cognitive Radio Networks to Improve Quality of Service At Secondary User	N/A
1569772691	Noise Reduction of Speech Signal Using Bayesian State-Space Kalman Filter	545
1569773951	An Adaptive Approach to Mitigate the Effects of I/Q Imbalance and Multipath Channel	550
1569774061	Mono-pulse Comparator Network System with Hybrid Rings	556
1569774149	Code-Aided Synchronization with QPSK, 8-PSK and 16-QAM Modulations	561
1569774283	Joint Peak Amplitude and Impulsive Noise Clippings in OFDM-based Power Line Communications	567
1569774379	A Quadratic Programming Approach in Pulse Shaping Filter Design to Reducing PAPR in OFDM	572
1569766499	Simultaneous OSNR and CD Monitoring for NRZ-DPSK and DQPSK Signals by Single-Channel Sampling Technique	577
1569767027	Performance Evaluation of Virtualized Architectures on Windows Server Operating Systems	N/A
1569771923	Redefining Flow Label in IPv6 and MPLS Headers for End to End QoS	585
1569772043	Reducing the Oscillations Between Overlay Routing and Traffic Engineering by Repeated Game Theory	591
1569774005	P2P Traffic Classification in Encrypted Tunnels	597
1569774571	Programmable Objectification and Instance Hosting for IoT Nodes	603
1569774623	Hybrid Searching Scheme Supported by Dynamic Weighted Distributed Label Clustering in Social Networks	609
1569766095	IEEE 802.15.4g SUN MR-OQPSK PHY Using A Novel CA-CDM Scheme	614
1569766449	Inter-channel Nonlinearity Equalization Based on Volterra Series in Polarization-Division-Multiplexed WDM Systems	620
1569778191	Investigation of Nolen Matrix Beamformer Usability for Capacity Analysis in Wireless MIMO Systems	622
1569765047	Investigation of RF Phase and Power Variation by High Optical Power in Visible Light Communication	624
1569766213	Mobile Flow-Aware Management for Mobility and QoS Support in Mobile Networks	626

1569774985	Modified Unequal Error Protection for the H.264/AVC Video Frames with Macroblocks' Motion Energy Estimation	632
1569774957	Multiple Doppler Estimation Based ICI Elimination Scheme in OFDM Over High-Mobility Channels with LoS Path	637
1569764979	Partial Feedback Scheme with an Interference-Aware Subcarrier Allocation Scheme in a Correlated LTE Downlink	643
1569754615	Regularization Selection Method for LMS-Type Sparse Multipath Channel Estimation	649
1569755977	Short-Length FSU-SCQICs Over Coherent and Incoherent Stochastic	655
1569764967	Aeronautical MISO Channels Soft Linear MMSE Detection for Coded MIMO Systems	657
1569766261	Spatial Aware Signal Space Clustering Algorithm for Optimal Calibration	661
1569764989	Point Locations in Location Fingerprinting Wireless Sensor Networks Node Localization Via Leader Intelligent Selection Optimization Algorithm	666
1569777465	Uplink Performance Analysis of Very Large Single-Cell MU-MIMO System with MRC Receiver	672
1569764995	HTTP-sCAN: Detecting HTTP-flooding attaCk by Modeling multi-feAtures of Web Browsing Behavior From Noisy Dataset	677
1569774961	Secure Integer Arithmetic Coding with Adjustable Interval Size	683
1569775099	Dynamic Channel Assignment Based on Interference Measurement with Threshold for Multi-beam Mobile Satellite Networks	688
1569775129	Correcting Temporal Artifacts in Compressive Video Sampling with Motion Estimation	693
1569776477	Analog Single-Carrier Transmission with Frequency-domain Equalization	698
1569777079	High-Gain Broad-Band Planar Antennas with Feed Patch Array and Partially Reflective Surfaces	N/A
1569778897	Performance Comparisons of Adaptive MVDR and Received LS	709
1569774749	Beamforming on the Downlink Time Varying Channel of HAP System A Routing Algorithm Based on Historical Orderliness in Delay Tolerant	N/A
1569774867	Networks Metaheuristic Algorithms Based Flow Anomaly Detector	939
1569774879	Resource Allocation Schemes in Energy Efficient OFDMA System Via	723
1569778009	Genetic Algorithm A Delay Estimation Approach in Stochastic Overlay Networks	728
1569778155	Joint Optimization of Frequency Allocation and User Association with	734
1569764035	Differentiated Service in Hyper-cellular Networks Dynamic Programming for Minimal Cost Topology with Two Terminal	740
1569774021	Reliability Constraint A Weight Based Backbone Construction Algorithm for Wireless Sensor	746
1569774313	Network MANET Routing Scheme for Establishing a Connection From an Isolated LAN to the Internet Using HTTP Communication	751
1569774745	Relay Selection Scheme for Cooperative Communication Networks Using Contract Theory	757

1569774813	Enhancing Preventive Start-Time Optimization Considering Both Failure	763
	and Non-Failure Scenarios	
1569774981	Auction Based Game Model for Power Trading in Wireless Cooperative	N/A
	Network	
1569766405	Design and Simulating a Network Interface-based RISC Cores	N/A