

TECHNICAL PROGRAM - 1st Day AM
(Wednesday, 1st June 2011)

Hall: Opening Ceremony & Keynote Speech 1

9:00-10:00, Wednesday 1st June 2011, Room Hall (10F)

Amphibia Networks - A Dependable Wireless and Wired Integrated Social Network Infrastructure -
Dr. Hiroshi Harada (NICT, Japan)

WA1: Demonstration

10:30-17:00, Wednesday 1st June 2011, Room A (3F 301)

Flexible Wireless System: Unified Wireless Platform for a Wide Variety of Wireless Systems

Doohwan Lee (Nippon Telegraph and Telephone Corporation), Takayuki Yamada (Nippon Telegraph and Telephone Corporation), Hiroyuki Shiba (Nippon Telegraph and Telephone Corporation), Yo Yamaguchi (Nippon Telegraph and Telephone Corporation), Takana Kaho (Nippon Telegraph and Telephone Corporation), and Kazuhiro Uehara (Nippon Telegraph and Telephone Corporation)

Experimental Investigation of IEEE802.11n Reception with Fractional Sampling

Ryosuke Nakamura (Keio University), Mamiko Inamori (Keio University), and Yukitoshi Sanada (Keio University)

Realization of TDD Two-way Multi-hop Relay Network with MIMO Network Coding

Keiichi Mizutani (Tokyo Institute of Technology), Yutaro Kida (Tokyo Institute of Technology), Takehiro Miyamoto (Nihon Dengyo Kosaku Co. Ltd.), Kei Sakaguchi (Tokyo Institute of Technology), and Kiyomichi Araki (Tokyo Institute of Technology)

A Demonstration of Adaptive Spectrum Sensing and Interference Suppressed Opportunistic Secondary Transmission

Samson Sequeira (WINLAB, ECE, Department, Rutgers University), Srinivas Pinagapany (WINLAB, ECE, Department, Rutgers University), Yasunori Futatsugi (System Platforms Research Labs, NEC Corporation), Masayuki Ariyoshi (System Platforms Research Labs, NEC Corporation), Predrag Spasojevic (WINLAB, ECE, Department, Rutgers University)

Cognitive Radio Systems for Heterogeneous and Spectrum Sharing Type Wireless Network Managements

Kentaro Ishizu (National Institute of Information and Communications Technology), Homare Murakami (National Institute of Information and Communications Technology), Hiroshi Harada (National Institute of Information and Communications Technology)

Emergency Radio Information System for Post-disaster Communication

Md. Abdur Rahman (Tokyo Institute of Technology), Azril Haniz (Tokyo Institute of Technology), Minseok Kim (Tokyo Institute of Technology), and Jun-Ichi Takada (Tokyo Institute of Technology)

Measurement method and result for Frequency Spectrum Sharing in Cognitive Radio

Osamu Takyu (Shinshu-University), Shunta Horie (Tokyo University of Science), Hasan Rajib Imam (The University of Electro-Communications), Masahiro Furuichi (Tokyo University of Science), Takamasa Kimura (The University of Electro-Communications), Takeo Fujii (The University of Electro-Communications), Yohtaro Umeda (Tokyo University of Science)

WB1: Spectrum Sensing I

10:30-12:00, Wednesday 1st June 2011, Room B (3F 302)

Session Chair: Takeo Fujii (The University of Electro-Communications, Japan)

New Robust Sensing Methods for DVB-T Signals

Chunyi Song (NICT), Mohammad Azizur Rahman (NICT), Hiroshi Harada (NICT)

A New Spectrum Sensing Scheme Using Overlap FFT Filter-bank for Dynamic Spectrum Access

Takanori Sato (Ibaraki University), Masahiro Umehira (Ibaraki University)

Propagation Based Spectrum Sensing: A Novel Beamforming Detection Method

Jonathan Lu (Polytechnic Institute of New York University), I-Tai Lu (Polytechnic Institute of New York University)

B-SSCT: A Block Sequential Spectrum Sensing Scheme for Cognitive Radio

Yan Xin (NEC Laboratories America Inc.), Honghai Zhang (NEC Laboratories America Inc.) , Sampath Rangarajan (NEC Laboratories America Inc.), Kyungtae Kim (NEC Laboratories America Inc.)

WC1: Spectrum Sharing

10:30-12:00, Wednesday 1st June 2011, Room C (3F 303)

Session Chair: Predrag Spasojevic (Rutgers University, USA)

Impact of Antenna Selection on Cognitive Radio System Capacity

Pawel A. Dmochowski (Victoria University of Wellington), Peter J. Smith (University of Canterbury), Mansoor Shafi (Telecom New Zealand), Himal A. Suraweera (Singapore University of Technology and Design)

Binary Power Control in Dynamic Spectrum Access

Brage Ellingsæter (University Graduate Center at Kjeller / Norwegian Defense Research Establishment), Torleiv Maseng (Norwegian Defense Research Establishment)

Distributed Scheduling Algorithm for Cooperative Transmission with Multiple Relays

Woongsup Lee (KAIST), Dong-Ho Cho (KAIST)

Cooperation based Spectrum Management Scheme in Ad-hoc Cognitive Radio System

Woongsup Lee (KAIST), Dong-Ho Cho (KAIST)

TECHNICAL PROGRAM - 1st Day PM1
(Wednesday, 1st June 2011)

WA2: Demonstration

10:30-17:00, Wednesday 1st June 2011, Room A (3F 301)

Same with WA1: Demonstration

WB2: Spectrum Sensing II

14:00-15:45, Wednesday 1st June 2011, Room B (3F 302)

Session Chair: Shigenobu Sasaki (Niigata University, Japan)

Statistical Test for Multiple Primary User Spectrum Sensing

Lu Wei (Aalto University), Olav Tirkkonen (Aalto University)

Eigenvalue Ratio Detection based on Exact Moments of Smallest and Largest Eigenvalues

Muhammad Zeeshan Shakir (King Abdullah University of Science and Technology), Wuchen Tang (University of Surrey), Anlei Rao (King Abdullah University of Science and Technology), Muhammad Ali Imran (University of Surrey), Mohamed Slim Alouini (King Abdullah University of Science and Technology)

Low Complexity Cyclostationary Feature Detection Method to Compensate Cyclostationarity-Degradation by Guard Interval Insertion

Hiro Yoshi Yano (Keio University), Osamu Takyu (Shinshu University), Takeo Fujii (The University of Electro-Communications), Tomoaki Ohtsuki (Keio University)

Multitaper Spectrum Sensing of OFDMA Signals in Frequency Selective Fading Environment

Yan Xin (NEC Labs America Inc), Kyungtae Kim (NEC Labs America Inc.), Sampath Rangarajan (NEC Labs America Inc.)

Spectrum Sensing in Public Safety Applications: The 2-D LAD ACC Method

Johanna Vartiainen (University of Oulu, Centre for Wireless Communications), Janne Lehtomäki (University of Oulu, Centre for Wireless Communications), Timo Bräysy (University of Oulu, Centre for Wireless Communications), Kenta Umebayashi (Tokyo University of Agriculture and Technology)

WC2: Dynamic Spectrum Access

14:00-15:45, Wednesday 1st June 2011, Room C (3F 303)

Session Chair: Shinsuke Ibi (Osaka University, Japan)

Spectrum Sharing with Interference Coordination under Outage Probability Constraint

Jing Wang (Beijing University of Posts and Telecommunications), Peili Cai (Texas A&M University), Ping Zhang (Beijing University of Posts and Telecommunications), Guixia Kang (Beijing University of Posts and Telecommunications)

Distributed Beam-Forming and Power Control in Multi-Relay Underlay Cognitive Radio Networks: A Game Theoretical Approach

Alireza Louni (Sharif University of Technology), Babak Khalaj (Sharif University)

A Game-theoretic Approach for Opportunistic Transmission Scheme in Cognitive Radio Networks with Incomplete Information

Xuesong Tan (University of Electronic Science and Technology of China), Liang Li (University of Electronic Science and Technology of China), Wei Guo (University of Electronic Science and Technology of China)

Upper Confidence Bound Algorithm for Opportunistic Spectrum Access with Sensing Errors

Wassim Jouini (SUPELEC/IETR), Christophe Moy (SUPELEC), Jacques Palicot (SUPELEC)

Distributed Channel Assignment Algorithm based on Simulated Annealing for Uncoordinated OSA-Enabled WLANs

Francisco Novillo (Technical University of Catalonia), Ramon Ferrus (Technical University of Catalonia)

Joint Switched Transmit Diversity and Adaptive Modulation in Spectrum Sharing Systems

Khalid A. Qaraqe, (Texas A&M University at Qatar), Zied Bouida (Texas A&M University at Qatar), Mohamed Abdallah (Texas A&M University at Qatar), Mohamed-Slim Alouini (Texas A&M University at Qatar)

TECHNICAL PROGRAM - 1st Day PM2
(Wednesday, 1st June 2011)

WA3: Demonstration

10:30-17:00, Wednesday 1st June 2011, Room A (3F 301)

Same with WA1: Demonstration

WB3: Cooperative Spectrum Sensing

16:15-18:00, Wednesday 1st June 2011, Room B (3F 302)

Session Chair: Minseok Kim (Tokyo Institute of Technology, Japan)

A Tree based Recovery Algorithm for Block Sparse Signals

Wenbin Guo (Beijing University of Posts and Telecommunications), Xing Wang (Beijing University of Posts and Telecommunications), Yang Lu (Beijing University of Posts and Telecommunications), Wenbo Wang (Beijing University of Posts and Telecommunications)

Optimized Strategies for Coordinated Spectrum Sensing in Cognitive Radio Networks

Zaili Wang (Beijing University of Posts and Telecommunications), Zhiyong Feng (Beijing University of Posts and Telecommunications), Di Zhang (Beijing University of Posts and Telecommunications), Jiantao Xue (Beijing University of Posts and Telecommunications), Ping Zhang (Beijing University of Posts and Telecommunications)

GLRT-Based Cooperative Sensing in Cognitive Radio Networks with Partial CSI

Xitao Gong (RWTH Aachen University), Adrian Ispas (RWTH Aachen University), Gerd Ascheid (RWTH Aachen University)

Contribution based Cooperative Spectrum Sensing against Malfunction Nodes in Cognitive Radio Networks

Taiping Cui (Inha University), Bin Shen (Inha University), Chengshi Zhao (Inha University), Kyung Sup Kwak (Inha University),

A Novel Power Controlled Sensing Information Gathering for Cooperative Sensing on Shared Spectrum with Primary Spectrum

Mai Ohta (The University of Electro-Communications), Takeo Fujii (The University of Electro-Communications), Kazushi Muraoka (NEC Corporation), Masayuki Ariyoshi (NEC Corporation)

TECHNICAL PROGRAM - 2nd Day AM
(Thursday, 2nd June 2011)

Hall: Keynote Speech 2

9:00-10:00, Thursday 2nd June 2011, Room Hall (10F)

Information Theoretic Fundamentals, Regulatory Issues, Physical Limitations and the Future of Opportunistic Transmission

Prof. Vahid Tarokh (Harvard University, USA)

TA1: Special Session 1 --- Standardization Activities of Cognitive Radio

10:30-12:00, Thursday 2nd June 2011, Room A (3F 301)

Session Chair: Hitoshi Yoshino (Softbank Mobile Corporation, Japan)

ITU-R Standardization Activities on Cognitive Radio Systems (Invited Paper)

Stanislav Filin (NICT), Homare Murakami (NICT), Hiroshi Harada (NICT), Hitoshi Yoshino (Softbank Mobile Corp.), Kanshiro Kashiki (KDDI Labs), Tatsuo Shibata (ATR)

Cognitive Radio Systems in UHF White Spaces: CEPT Developments (Invited Talk)

Alexandre Kholod (Federal Office of Communications (OFCOM), Switzerland)

IEEE Dynamic Spectrum Access Networks (DYSPAN) Standards Committee (Invited Paper)

Hiroshi Harada (NICT), Yohannes D. Alemseged (NICT), Oliver Holland (King's College of London)

National Standardization Activities Within China (Invited Paper)

Zhiyong Feng (Beijing University of Posts and Telecommunications), Ping Zhang (Beijing University of Posts and Telecommunications), Ying Xu (Beijing University of Posts and Telecommunications)

TB1 : Flexible PHY/MAC Control

10:30-12:00, Thursday 2nd June 2011, Room B (3F 302)

Session Chair: Masahiro Umehira (Ibaraki University, Japan)

Enhancing Spectral Efficiency of Transform Domain Communication Systems by using a Multidimensional Modulation

Guillaume Fumat (University of Toulouse), Pascal Chargé (University of Nantes), Ahmed Zoubir (Axess Europe), Danièle Fournier-Prunaret (University of Toulouse)

Signal Separation and Reconstruction Method for Simultaneously Received Multi-System Signals in a Unified Wireless System

Takayuki Yamada (NTT), Doohwan Lee (NTT), Hiroyuki Shiba (NTT), Yo Yamaguchi (NTT), Kazuhiro Uehara (NTT)

Flexible Multicarrier PHY Design for Cognitive Radio in White Space

Rohit Datta (TU Dresden), Matthieu Gautier (CEA), Vincent Berg (CEA), Yasunori Futatsugi (NEC Corporation), Masayuki Ariyoshi (NEC Corporation), Mario Schühler (Fraunhofer Institute for Integrated Circuits), Zsolt Kollár (Budapest University of Technology and Economics), Peter Horváth (Budapest University of Technology and Economics), Dominique Noguet (CEA), Gerhard Fettweis (TU Dresden)

Path Diversity with Imaging Components on Separate Frequency Channel in Fractional Sampling OFDM

Hiroki Suzuki (Keio University), Mamiko Inamori (Keio University), Yukitoshi Sanada (Keio University), Takahiko Kishi (TOYOTA InfoTechnology Center, Co., Ltd.), Mansaku Nakano (TOYOTA InfoTechnology Center, Co., Ltd.), Fumiaki Nakao (TOYOTA InfoTechnology Center, Co., Ltd.), Kazuaki Minami (TOYOTA InfoTechnology Center, Co., Ltd.)

TC1 : Hardware Design & Prototyping

10:30-12:00, Thursday 2nd June 2011, Room C (3F 303)

Session Chair: Suguru Kameda (Tohoku University, Japan)

$\Sigma \Delta$ ADC with Fractional Sample Rate Conversion for Software Defined Radio Receiver

Akira Tanaka (Keio University), Mamiko Inamori (Keio University), Yukitoshi Sanada (Keio University)

Design and Performance Trade-offs in Parallelized RF SDR Architecture

Sami Kiminki (Aalto University), Ville Saari (Aalto University), Aarno Pärssinen (Nokia Research Center), Vesa Hirvisalo (Aalto University), Antti Immonen (Nokia Research Center), Jussi Ryyänen (Aalto University), Tommi Zetterman (Nokia Research Center)

An Efficient Routing Protocol on a Dynamic Cluster-based Sensor Network

A.K.M. Muzahidul Islam (Islam Universiti Teknologi), Koichi Wada (Nagoya Institute of Technology), Shahrum Shah Abdullah (Abdullah Universiti Teknologi Malaysia), Jiro Uchida (AISIN AW Co., Ltd.), Wei Chen (Tennessee State University)

Digital and Dynamic Certification in the Framework of the Novel Revised R&TTE Directive in Europe

Markus Mueck (Intel Mobile Communications), Thomas Haustein (Fraunhofer Heinrich Hertz Institute), Paul Bender (Bundesnetzagentur)

TECHNICAL PROGRAM - 2nd Day PM1
(Thursday, 2nd June 2011)

TA2: Spectrum Management

14:00-15:45, Thursday 2nd June 2011, Room A (3F 301)

Session Chair: Stanislav Filin (NICT, Japan)

Location-Aware Spectrum and Power Allocation in Joint Cognitive Communication-Radar Networks

Yogesh Nijssure (Newcastle University), Yifan Chen (Newcastle University), Chau Yuen (Singapore University of Technology and Design), Yong Huat Chew (Institute for Infocomm Research)

Dynamic Spectrum Allocation for Heterogeneous Cognitive Radio Networks from Auction Perspective

Jinzhao Su (BUAA), Jianfei Wang (BUAA), Wei Wu (BUAA)

An Efficient Truthful Double Spectrum Auction Design for Dynamic Spectrum Access

Enxin Yao (Peking University), Luxi Lu (Peking University), Wei Jiang (Peking University)

Broker Based Secondary Spectrum Trading

Joseph Mwangoka (Instituto de Telecomunicações – Aveiro), Paulo Marques (Instituto de Telecomunicações – Aveiro), Jonathan Rodriguez (Instituto de Telecomunicações – Aveiro)

Sensing Order Dispersion for Autonomous Cognitive Radios

Zaheer Khan (CWC, University of Oulu), Janne Lehtomäki (CWC, University of Oulu), Miia Mustonen (VTT, Technical Research Center of Finland), Marja Matinmikko (VTT, Technical Research Center of Finland)

TB2: Heterogeneous Networks

14:00-15:45, Thursday 2nd June 2011, Room B (3F 302)

Session Chair: Takashi Shono (Intel Corporation, Japan)

Online Spectrum Allocation for Cognitive Cellular Network Supporting Scalable Demands

Jianfei Wang (Beihang University), JinZhao Su (Beihang University), Wei Wu (Beihang University)

Spectrum Allocation Strategies for Heterogeneous Networks

Rindra Ramamonjison (Tokyo Institute of Technology), Gia Khanh Tran (Tokyo Institute of Technology), Kei Sakaguchi (Tokyo Institute of Technology), Kiyomichi Araki (Tokyo Institute of Technology), Shoji Kaneko (KDDI R&D Laboratories Inc, Japan), Yoji Kishi (KDDI R&D Laboratories Inc, Japan), Noriaki Miyazaki (KDDI R&D Laboratories Inc, Japan)

Intelligent Data Rate Control in Cognitive Mobile Heterogeneous Networks

Jeich Mar (Yuan-Ze University), Hsiao-Chen Nien (Yuan-Ze University)

Proposal of Heterogeneous Wireless Communication Network with Soft Handover in Application Layer: Feasibility Study Based on Field Trial Results

Suguru Kameda (Tohoku University), Hiroshi Oguma (Miyagi Prefectural Government), Noboru Izuka (Softbank Telecom), Fumihiro Yamagata (Tohoku University), Yasuyoshi Asano (Softbank Telecom), Yoshiharu Yamazaki (Softbank Telecom), Shoichi Tanifuji (Tohoku University), Noriharu Suematsu (Tohoku University), Tadashi Takagi (Tohoku University), Kazuo Tsubouchi (Tohoku University)

Potential Game Approach for Self-Organization Scheme in Open Access Heterogeneous Networks

I Wayan Mustika (Kyoto University), Koji Yamamoto (Kyoto University), Hidekazu Murata (Kyoto University), Susumu Yoshida (Kyoto University)

TC2: Implementation of Spectrum Sensing

14:00-15:45, Thursday 2nd June 2011, Room C (3F 303)

Session Chair: Osamu Takyu (Shinshu University, Japan)

Fast and Reliable Sensing using a Background Process for Noise Estimation

Dorin Panaitopol (NEC Technologies UK), Abdoulaye Bagayoko (NEC Technologies UK), Philippe Delahaye (NEC Technologies UK), Lanto Rakotoharison (NEC Technologies UK)

Automatic Modulation Classification in Wireless Disaster Area Emergency Network (W-DAEN)

Md Abdur Rahman (Tokyo Institute of Technology), Azril Haniz (Tokyo Institute of technology), Minseok Kim (Tokyo Institute of technology), Jun-ichi Takada (Tokyo Institute of technology)

Development of a TV White Space Cognitive Radio Prototype and its Spectrum Sensing Performance

Mohammad Azizur Rahman (NICT), Chunyi Song (NICT), Hiroshi Harada (NICT),

Multi-Mode, Multi-Band Spectrum Sensor for Cognitive Radios Embedded to a Mobile Phone

Sami Kallioinen (Renesas Mobile), Mikko Vääräkangas (Nokia Research Center), Ilari Teikari (Nokia Research Center), Ping Hui (Nokia Research Center), Jani Ollikainen (Nokia Research Center), Aarno Pärssinen (Renesas Mobile), Vesa Turunen (Aalto University School of Electrical Engineering), Marko Kosunen (Aalto University School of Electrical Engineering), Jussi Ryyänen (Aalto University School of Electrical Engineering)

Trade-offs in Primary Detection Using a Mobile Phone as a Sensing Device

Mikko Vääräkangas (Nokia Research Center), Sami Kallioinen (Renesas Mobile), Aarno Pärssinen (Renesas Mobile), Vesa Turunen (Aalto University School of Electrical Engineering), Jussi Ryyänen (Aalto University School of Electrical Engineering)

Sparse Signal Sensing with Non-uniform Undersampling and Frequency Excision

Andre Bourdoux (IMEC), Sofie Pollin (IMEC), Antoine Dejonghe (IMEC), Liesbet Van Der Perre (IMEC)

TECHNICAL PROGRAM - 2nd Day PM2
(Thursday, 2nd June 2011)

TA3: Spectrum Map

16:15-18:00, Thursday 2nd June 2011, Room A (3F 301)

Session Chair: Kentaro Ishizu (NICT, Japan)

An Algorithm for Fast REM Construction

Sébastien Grimoud (France Telecom), Berna Sayrac (France Telecom), Sana Ben Jemaa (France Telecom), Eric Moulines (France Telecom)

Strengthening Radio Environment Maps with Primary-User Statistical Patterns for Enhancing Cognitive Radio Operation

Faouzi Bouali (Universitat Politecnica de Catalunya), Oriol Sallent (Universitat Politecnica de Catalunya), Jordi Perez-Romero (Universitat Politecnica de Catalunya), Ramon Agusti (Universitat Politecnica de Catalunya)

Spectrum Map: Toward Predicting the Spatial Distribution of Spectrum Usage in CRNs

Saptarshi Debroy (University of Central Florida), Shameek Bhattacharjee (University of Central Florida), Mainak Chatterjee (University of Central Florida)

TB3: MAC for Cognitive Radio

16:15-18:00, Thursday 2nd June 2011, Room B (3F 302)

Session Chair: Kazuto Yano (ATR, Japan)

Cognitive WSN Transmission Control for Energy Efficiency under WLAN Coexistence

Ioannis Glaropoulos (KTH Royal Institute of Technology), Viktoria Fodor (KTH Royal Institute of Technology), Loreto Pescosolido (University of Rome "La Sapienza"), Chiara Petrioli (University of Rome "La Sapienza")

Dynamic Selection of CWmin in Cognitive Radio Networks for Protecting IEEE 802.11 Primary Users

Kenta Umabayashi (Tokyo University of Agriculture and Technology), Janne Lehtomaki (University of Oulu), Yasuo Suzuki (Tokyo University of Agriculture and Technology)

Transmitting-Collision Tradeoff in Cognitive Radio Networks: A Flexible Transmitting Approach

Hong du (Beijing University of Posts and Telecommunications), Zaixue Wei (Beijing University of Posts and Telecommunications), Lu Ye (Beijing University of Posts and Telecommunications), Yu Wang (Beijing University of Posts and Telecommunications), Dacheng Yang (Beijing University of Posts and Telecommunications)

Joint Admission Control for Cooperative Cognitive Radio Networks

Jin Lai (Macquarie University, Australia), Eryk Dutkiewicz (Macquarie University, Australia), Ren Ping Liu (CSIRO), Rein Vesilo (Macquarie University, Australia)

Statistical Analysis of Interference Avoidance based on Multi-Frequency RTS/CTS Cognitive Radio

Tian Tian (Doshisha University), Iwai Hisato (Doshisha University), Sasaoka Hideichi (Doshisha University),

TECHNICAL PROGRAM - 3rd Day AM
(Friday, 3rd June 2011)

Hall: Keynote Speech 3-4

9:00-10:00, Friday 3rd June 2011, Room Hall (10F)

Keynote Speech3

Outlook and Issues of Radio Use - Policy for Realizing Wireless Broadband -

Mr. Yasuo Tawara (Director of Land Mobile Communications Division, MIC, JAPAN)

Keynote Speech4

To be or not to be "Cognitive"

Dr. Yasuhiko Ito (KDDI Lab., Japan, Radio Regulation Board of ITU)

Hall:

Plenary Panel Session Regulation and Standardization Landscape of Cognitive Radio

10:30-12:00, Friday 3rd June 2011, Room Hall (10F)

Regulation and Standardization Landscape of Cognitive Radio

Panelists: Hitoshi Yoshino (Softbank Mobile Corp., Japan (ITU-R WG 5A5 Chair)), Michele Fitch (British Telecom, UK), Stanislav Filin (NICT, Japan) and one more panelist.

FA1: Special Session 2 --- Strategic National and Regional R&D Projects Regarding Efficient Spectrum Management for Future Wireless Network I

14:00-15:45, Friday 3rd June 2011, Room A (3F 301)

Session Chair: Kanshiro Kashiki (KDDI R&D Laboratories, Japan)

R & D Project regarding Cooperative Heterogeneous Radio Networks for Reliability (Invited Talk)

Akira Yamaguchi (KDDI R&D Laboratories), Kanshiro Kashiki (KDDI R&D Laboratories), Toshinori Suzuki (KDDI R&D Laboratories), Sadao Obana (ATR Adaptive Communications Research Laboratories), Tatsuo Shibata (ATR Adaptive Communications Research Laboratories), Akio Hasegawa (ATR Adaptive Communications Research Laboratories)

Cooperative Control Technologies for Multiple Base Stations in an Environment Consisting of Various Cell Sizes (Invited Talk)

Takao Okamawari (Softbank Mobile Corp.), Manabu Mikami (Softbank Mobile Corp.), Hideki Hayashi (Softbank Mobile Corp.), Hitoshi Yoshino (Softbank Mobile Corp.), Teruya Fujii (Softbank Mobile Corp.)

Feasibility Study on Spectrum Sharing type Cognitive Radio System with Outband Pilot Channel (Invited Paper)

Kentaro Ishizu (NICT), Homare Murakami (NICT), Hiroshi Harada (NICT)

Research on Cognitive Wireless Networks : Theory, Key Technologies and Testbed (Invited Paper)

Ying Xu (Beijing University of Posts and Telecommunications), Zhiyong Feng (Beijing University of Posts and Telecommunications), Ping Zhang (Beijing University of Posts and Telecommunications)

C-PMSE – Improved Spectrum Utilization and Coexistence by Cognitive PMSE Systems (Invited Paper)

Uwe Beutnagel-Buchner (Robert Bosch GmbH), Norbert Hilbich (Sennheiser Electronic GmbH & Co. KG.), Andreas Wilzeck (Leibniz Universität Hannover)

FB1: Cognitive Relay Network

14:00-15:45, Friday 3rd June 2011, Room B (3F 302)

Session Chair: Tran Gia Khanh (Tokyo Institute of Technology, Japan)

A Truthful Optimal Path Auction for DSA Networks

Swastik Kumar Brahma (University of Central Florida), Mainak Chatterjee (University of Central Florida)

A Multihop Cooperative Routing Algorithm for Minimizing the Number of Hops in Spectrum Sharing Networks

I-Te Lin (Keio University), Iwao Sasase (Keio University)

A Low-Interference Relay Selection for Decode-and-Forward Cooperative Network in Underlay Cognitive Radio

Chih-Wen (Wenson) Chang (National Cheng Kung University), Po-Hsun Lin (National Cheng Kung University), Szu-Lin Su (National Cheng Kung University)

Spatially Varied Control Channel Assignment in Cognitive Radio Ad Hoc Networks

Hsiu Yu (National Cheng Kung University), Kuo-Feng Ssu (National Cheng Kung University)

Self-Enforcement Strategy for Energy-Efficient Relaying in Wireless Ad-hoc Networks

Michal Kucharzak (Wroclawskie Centrum Badan EIT+), Jacek Kibilda (Wroclawskie Centrum Badan EIT+), Marcin Filo (Wroclawskie Centrum Badan EIT+), Radoslaw Piesiewicz (Wroclawskie Centrum Badan EIT+)

FC1: Opportunistic Spectrum Access

14:00-15:45, Friday 3rd June 2011, Room C (3F 303)

Session Chair: Alexandre Kholod (Federal Office of Communications, Switzerland)

Receiver-side Opportunism in Cognitive Networks

Natasha Devroye (University of Illinois at Chicago), Petar Popovski (Aalborg University)

Modeling and Simulation of Time-Correlation Properties of Spectrum Use in Cognitive Radio

Miguel López-Benítez (Universitat Politècnica de Catalunya), Fernando Casadevall (Universitat Politècnica de Catalunya)

Stochastic-Geometric Model of Expected Service Area for Cognitive TV White Space Wireless Networks

Gabriel Porto Villardi (NICT), Giuseppe Thadeu Freitas de Abreu (University of Oulu), Hiroshi Harada (NICT)

Game Theoretic Modelling for Dynamic Spectrum Access in TV Whitespace

Ligia Cremene (UTCN), Dumitru Dumitrescu (Babes-Bolyai University of Cluj-Napoca), Reka Nagy (Babes-Bolyai University of Cluj-Napoca), Marcel Cremene (Technical University of Cluj-Napoca)

An Investigation into the Spectrum Occupancy in Japan in the Context of TV White Space Systems

Soraya Contreras (Télécom Bretagne), Gabriel Villardi (NICT), Ryuhei Funada (NICT), Hiroshi Harada (NICT)

FA2: Special Session 2 --- Strategical National and Regional R&D Projects Regarding Efficient Spectrum Management for Future Wireless Network II

16:15-18:00, Friday 3rd June 2011, Room A (3F 301)

Session Chair: Shinsuke Ibi (Osaka University, Japan)

A National Research Project on Radio Resource Control Technologies among Multiple Radio Systems in the Same Frequency Band (Invited Talk)

Hidetoshi Kayama (NTT DOCOMO), Shunji Miura (NTT DOCOMO), Hiromasa Fujii (NTT DOCOMO), Hiroki Harada (NTT DOCOMO), Kentarou Saito (NTT DOCOMO), Kazuto Yano (ATR), Masahiro Uno (ATR), Masazumi Ueba (ATR)

The Self-Growing Concept – A Novel Framework Developed by the FP7 CONSERN Project (Invited Paper)

Nancy Alonistioti (National and Kapodistrian Univeristy of Athens), Egon Schulz (Huawei Germany), George Koudouridis (Huawei Sweden), Simon Delaere (IBBT), Jeroen Declerk (IMEC), Makis Stamatelatos (National and Kapodistrian Univeristy of Athens), Marc Emmelmann (Fraunhofer FOKUS), Ioannis P. Chochliouros (OTE), Markus Mueck (Infineon Technologies)

Opportunistic Networks and Cognitive Management Systems for Efficient Application Provisioning in the Future Internet: An Overview (Invited Paper)

Andreas Georgakopoulos (University of Piraeus), Kostas Tsagkaris (University of Piraeus), Vera Stavroulaki (University of Piraeus), Panagiotis Demestichas (University of Piraeus), Jens Gebert (Alcatel-Lucent), Klaus Moessner (University of Surrey), Oriol Sallent (Universitat Politecnica de Catalunya), Marcin Filo (EIT+ Research Center)

A Public Broadband Wireless Communication System on VHF TV band

Hiroshi Harada (NICT), Masayuki Oodo (NICT), Ryuhei Funada (NICT), Mingtuo Zhou (NICT Singapore Wireless Communications Laboratory), Liru Lu (NICT Singapore Wireless Communications Laboratory), Xin Zhang (NICT Singapore Wireless Communications Laboratory)

Dynamic Spectrum Access Opportunities for Public Safety in Land Mobile Radio Bands

Tanim M. Taher (Illinois Institute of Technology), Roger B. Bacchus (Illinois Institute of Technology), Kenneth J. Zdunek (Illinois Institute of Technology), Dennis A. Roberson (Illinois Institute of Technology)

FB2: Beamforming for Interference Management

16:15-18:00, Friday 3rd June 2011, Room B (3F 302)

Session Chair: Seiichi Sampei (Osaka University, Japan)

Exploiting spatial dimension in cognitive radios and networks

Heli Sarvanko (VTT), Marko Höyhty (VTT), Marja Matinmikko (VTT), Aarne Mämmelä (VTT)

Uncoordinated Beamforming for Cognitive Networks

Simon Yiu (Alcatel-Lucent), Chan-Byoung Chae (Alcatel-Lucent), Kai Yang (Alcatel-Lucent), Doru Calin (Alcatel-Lucent)

Low Complexity Cooperative Multicast Beamforming in Multiuser Multicell Downlink Networks

Guido Dartmann (RWTH Aachen University), Xitao Gong (RWTH Aachen University), Gerd Ascheid (RWTH Aachen University)

Iterative Robust Downlink Beamforming in Cognitive Radio Networks

Imran Wajid (TU Darmstadt), Hristina Nikolaeva (TU Darmstadt), Marius Pesavento (TU Darmstadt)

Joint Coordinated Multicell Processing and MIMO: selection of Base Stations and gain

Virgile Garcia (INRIA), Nikolai Lebedev (CPE Lyon), Jean-Marie Gorce (INSA de Lyon)

FC 2: Capacity & Interference Analysis

16:15-18:00, Friday 3rd June 2011, Room C (3F 303)

Session Chair: Natasha Devroye (University of Illinois at Chicago, USA)

The Capacity of Cognitive Ad-Hoc Networks with Carrier Sensing Errors

Seungmo Kim (Samsung Electro-Mechanics Co., Ltd), Tahjoon Park (Samsung Electro-Mechanics Co., Ltd), Wan Choi (KAIST), Youngnam Han (KAIST)

Achievable Capacity of Cognitive Radio Systems Coexisting with a Macro Cellular System

Hiromasa Fujii (NTT DoCoMo, Inc.), Shunji Miura (NTT DoCoMo, Inc.), Hidetoshi Kayama (NTT DoCoMo, Inc.),

The Sum Capacity of Underlay Cognitive Broadcast Channel

Liang Li, (Technical University Darmstadt), Marius Pesavento (Technical University Darmstadt)

On cognitive Channels with an Oblivion Constraint

Daniela Tuninetti (University of Illinois at Chicago), Natasha Devroye (University of Illinois at Chicago), Yasaman Keshkarjahromi (University of Illinois at Chicago)

Network Scale Control for Distributed Networks by BER Analysis

Junyan Chen (Shanghai Jiaotong University), Jing Liu (Shanghai Jiaotong University), Yunfeng Guan (Shanghai Jiaotong University), Wenlin Wang (Shanghai Jiaotong University)