

IEEE ICC 2012 TO FEATURE “PAPERLESS+ CONFERENCE” FROM JUNE 10 – 15 IN OTTAWA, CANADA

The IEEE International Conference on Communications (ICC), the leading international venue dedicated to the advancement of wireless and wireline communications worldwide, has initiated registration for its first “paperless+” annual event to be held June 10 – 15 in Ottawa, Canada. Themed “CONNECT – COMMUNICATE – COLLABORATE,” IEEE ICC 2012 is expected to host more than 2,000 industry professionals, scientists, academics and government officials attending nearly 1,500 presentations highlighting the entire range of global voice, data, image and multimedia technologies.

As part of this year’s registration package, all full, limited and one-day registrants will also receive a Blackberry Playbook 16GB upon arrival. In the desire to actively promote conservationism, efficiency and environmentalism, the conference will then update each tablet daily with all standard program and presentation information including the exhibition guide, news and updates.

Another prominent feature of the conference is the spectacular Ottawa Convention Centre, which is situated on the scenic banks of the Rideau Canal and embedded in the cultural center of Canada’s beautiful capital city. Newly-opened in April 2011, the \$170 million, four-story facility was designed to set standards for environmental design and sustainable practices, while serving as the centrepiece for exploring Ottawa’s world-class restaurants, galleries and museums such as the Canadian Museum of Nature, Canada Science & Technology Museum and the National Gallery of Canada.

“Ottawa is the ideal location for stimulating the scientific

exchange of ideas, identifying future trends and illuminating new business opportunities,” says the IEEE ICC 2012 General Chair Ibrahim Gedeon, CTO, Telus. “As the hub of Canadian government and the national centre of high technology commonly referred to as Silicon Valley North, Ottawa represents the highest level of scientific achievement with more than 1,800 separate corporations focused on the advance of the latest software, telecommunications, photonics, semiconductors, defence and wireless communications technologies,” adds IEEE ICC 2012 Executive Chair Wahab Almuhtadi, Algonquin College professor.

On Sunday, July 10, IEEE ICC 2012 will hold a special two-day workshop titled “Telecommunications: From Research to Standards.” On the following day, the conference will formally commence with a full day of tutorials and workshops spotlighted by the “special interest session” on “Humanitarian Communication Applications: Solutions for the next billion people.” Other tutorial and workshop topics include “Application Architectures for Machine to Machine Communications,” “Recent Advances in Wireless Sensor Networks,” “60 GHz Wireless Communication,” “Energy Harvesting for Communication,” “Intelligent Vehicular Networking,” “Mobile Consumer Health Care Networks,” “Cognitive Radio & Green Networking,” “Wireless Systems in the Future Internet” and “Cloud Networks.”

From Tuesday through Thursday, the conference schedule will then dramatically broaden with the presentation of hundreds of keynotes, business panels and technical symposia highlighting

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CONFERENCE PREVIEW

nearly every area of wireless networking, communications and theory. Key to this is the event's 16 Industry Forums, which will feature the addresses of leading industry experts such as Basil Alwan, CTO & President of Alcatel-Lucent's IP Division; Phil Winterbottom, CTO, Ericsson; Craig Farrell, CTO, Global Telecom Industry, IBM; James Segil, President of EdgeCast Networks; Vadim Lander, Chief Identity Architect, Oracle; and Scott Stevens, Vice President, Systems Engineering, Juniper Networks. Another Forum highpoint will be the discussion of numerous topics related to "Social Networks: Impact on Quality of Life," "NATO Cyber Defence Policy," "India's eGovernance," "Cloud Communications Security & Networking," "End-to-end Ethernet Management," "Heterogeneous (HeNet) Network Deployment," "Multi-screen IPTV," "Future Home Gateway Services," "True Green Data Centers" and "Enabling Your Cloud."

Over this three-day span, IEEE ICC 2012 will also punctuate its high-level schedule with the keynotes of noted experts like Eros Spadotto, Executive Vice President, Technology Strategy at TELUS; Matt Bross, CTO & Vice Chairman at Huawei; and Marcus Weldon, CTO at Alcatel-Lucent. Other renowned scientists and industry professionals expected to speak at the event are Lucy Hood, Executive Director at Communication Technology Management (CTM); Lauren States, Vice President, Cloud Computing at IBM; Ian Akyildiz, Professor at Georgia Tech; Victor Bahl, Director, MCRC at Microsoft; Vincent Poor, Professor at Princeton University; Raj Jain, Professor at Washington University, St-Louis; and P. R. Kumar, Professor at Texas A&M University.

Another special highlight is the event's comprehensive technical program composed of more than 200 individual sessions and the presentation of over 1,000 original papers. Throughout the conference, international attendees will have the opportunity to

explore the newest applications and advances in "Vehicular Network Synthetic Modeling," "3GPE: Energy Efficient Indoors Wi-Fi," "E-voting Systems that Ensure Voter Confidentiality & Accuracy," "Misbehaviour Detection in Next-Generation Networks," "Enriched IPv6 Services Personalization," "Smart Grid Machine-to-Machine Communications" "Green Optical Network Design" and "Automated Tactical Wireless Networks."

In addition, IEEE ICC 2012 will be earmarked by the Exhibition of Innovation, which will display the products and services of more than 20 leading international corporations. This includes the latest research and product and service developments from global telecommunications corporations such as Telus, Huawei, Nokia Siemens Networks, Cisco, LG, Juniper, NEC, RIM, Fujitsu, Oracle, Qualcomm, Comcast, SAP, Sigma, TELUS, Alcatel-Lucent, Ciena and IBM.

IEEE ICC 2012 will then conclude on Friday, June 15 with the last of the conference's 12 tutorials and 27 workshops. On this day, attendees will be presented the latest research, findings and applications entailing next-generation "Inter-Vehicular Communication," "New Frontiers in Opportunistic Communication," "Remote Well-being Monitoring in 4G Networks," "Mobile-Station and Base-Station Cooperation for Wireless Communications," "Network Coding: From Theory to Practice," "Next Generation Mobile Core Networks" and "Security & Forensics in Communications Systems."

For more information on IEEE ICC 2012 please visit <http://www.ieee-icc.org/2012>. The BlackBerry Playbook 16GB containing conference details, updates and program information will be provided to all full, limited and one-day registrants at the conference registration area upon arrival. ComSoc/IEEE members who register by Thursday, April 12 will receive a \$125 savings, while non-members will receive a \$180 reduction in the standard attendance fee.

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ICC'12 WS - CoCoNet 4: Workshop on Cooperative and Cognitive Mobile Networks - Committees and Welcome

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ICC'12 WS - CoCoNet 4: Workshop on Cooperative and Cognitive Mobile Networks - Program

	Monday, June 11
8:30 - 9:30	S1: <i>Keynote</i>
9:30 - 12:00	S2: <i>Cooperative networking</i>
12:00 - 14:00	
14:00 - 15:30	S3: <i>Cognitive radio</i>
15:30 - 16:00	
16:00 - 18:00	S4: <i>Network coding</i>

Monday, June 11

08:30 - 09:30

S1: Keynote

Room: M11

Chair: Frank H.P. Fitzek (Aalborg University, Denmark)

09:30 - 12:00

S2: Cooperative networking

Room: M11

Chair: Frank H.P. Fitzek (Aalborg University, Denmark)

10:00 *Delay-optimal Fair Scheduling and Resource Allocation in Multiuser Wireless Relay Networks*

Mohammad Moghaddari (University of Manitoba, Canada); Ekram Hossain (University of Manitoba, Canada); Long Bao Le (INRS, University of Quebec, Canada)
pp. 5553-5557

10:15 *Prolonged Network Life-time in Self-Organizing Peer-to-Peer Networks with E-RSSI Clustering*

Mehdi Tavakoli (TU Ilmenau, Germany); Bilal Zafar (Ilmenau University of Technology, Germany); Martin Haardt (Ilmenau University of Technology, Germany)
pp. 5558-5562

10:30 *Mode Selection for Device-to-Device (D2D) Communication under LTE-Advanced Networks*

Ziyang Liu (Beijing University of Post and Telecommunication, P.R. China); Tao Peng (Beijing University of Posts & Telecommunications, P.R. China); Shang Xiang (Beijing University of Posts and Telecommunications, P.R. China); Wenbo Wang (Beijing University of Posts and Telecommunications, P.R. China)
pp. 5563-5567

10:45 Airborne Trace Prediction based Relay Selection for Cooperative Communications in Aircraft Approach

Hua Li (Shanghai Jiao Tong University, P.R. China); Cunqing Hua (Shanghai Jiao Tong University, P.R. China); Cailian Chen (Shanghai Jiao Tong University, P.R. China); Xiping Guan (Shanghai Jiao Tong University, P.R. China)
pp. 5568-5572

11:00 Queue-aware Power Allocation for Multi-way Relay Networks

Miao Wang (Beijing Jiaotong University, P.R. China); Fanggang Wang (Beijing Jiaotong University, P.R. China); Zhangdui Zhong (Beijing Jiaotong University, P.R. China)
pp. 5573-5577

11:15 Opportunistic Relay Selection for Cooperative Networks with Buffers

Ioannis Krikidis (University of Cyprus, Cyprus); Themistoklis Charalambous (Royal Institute of Technology (KTH), Sweden); John Thompson (University of Edinburgh, United Kingdom)
pp. 5578-5582

11:30 A Low Complexity Equalization Method for Asynchronous Cooperative Relay Systems

Yanxiang Jiang (Southeast University, P.R. China); Jun Xiao (Southeast University, P.R. China); Xiaohu You (Southeast University, P.R. China)
pp. 5632-5636

11:45 Distributed Opportunistic and Diffused Coding in Multi-hop Wireless Networks

Thuong Van Vu (Université Pierre et Marie Curie, France); Thi Mai Trang Nguyen (Université Pierre et Marie Curie & LIP6, France); Guy Pujolle (University Pierre et Marie Curie - Paris 6, France)
pp. 5583-5587

14:00 - 15:30

S3: Cognitive radio

Room: M11

Chair: Frank H.P. Fitzek (Aalborg University, Denmark)

14:00 Radio Access Behavior (RAB) Based Cognitive Radio Classification and Identification

Nansai Hu (Stevens Institute of Technology, USA); Yu-Dong Yao (Stevens Institute of Technology, USA)
pp. 5588-5592

14:15 Cognitive Radio Enabling Opportunistic Spectrum Access in LTE-Advanced Femtocells

Carlos Herranz (Polytechnic University of Valencia, Spain); Vicente Osa (Universitat Politècnica de València, Spain); Jose F. Monserrat (Polytechnic University of Valencia, Spain); Daniel Calabuig (Universidad Politécnica de Valencia, Spain); Narcis Cardona (Universidad Politécnica Valencia, Spain); Xavier Gelabert (King's College London & Centre for Telecommunications Research (CTR), United Kingdom)

pp. 5593-5597

14:30 PAPR Reduction in OFDM Based Cognitive Radio with Blockwise-Subcarrier Activation

Abolfazl Ghassemi (Stanford University, USA); T. Aaron Gulliver (University of Victoria, Canada)

pp. 5598-5602

14:45 New Resource Allocation Scheme for Cognitive Relay Networks with Opportunistic Access

Ammar Zafar (King Abdullah University of Science and Technology, Saudi Arabia); Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Yunfei Chen (University of Warwick, United Kingdom); Redha M Radaydeh (Alfaisal University, Saudi Arabia)

pp. 5603-5607

15:00 MAC Protocol Identification Approach for Implement Smart Cognitive Radio

Sanqing Hu (Stevens Institute of Technology, USA); Yu-Dong Yao (Stevens Institute of Technology, USA); Zhuo Yang (Stevens Institute of Technology (USA), USA)

pp. 5608-5612

15:15 Cooperation for Secure Broadcasting in Cognitive Radio Networks

Frederic Gabry (KTH Royal Institute of Technology, Sweden); Nicolas Schrammar (KTH Royal Institute of Technology, Sweden); Maksym A. Girnyk (KTH Royal Institute of Technology, Sweden); Nan Li (KTH Royal Institute of Technology, Sweden); Ragnar Thobaben (KTH Royal Institute of Technology, Sweden); Lars K. Rasmussen (KTH Royal Institute of Technology, Sweden)

pp. 5613-5618

16:00 - 18:00

S4: Network coding

Room: M11

Chair: Frank H.P. Fitzek (Aalborg University, Denmark)

16:00 Antenna Selection Schemes for Energy Efficiency in Distributed Antenna Systems

Hong Li (Huawei Technologies Sweden AB, Sweden); Georgios P. Koudouridis (Huawei Technologies Sweden R&D Center & Royal Institute of Technology, Sweden); Jiayin Zhang (Huawei Technologies Co., Ltd, P.R. China)

pp. 5619-5623

16:15 CoMP in Heterogeneous Networks: A Low-Complexity Linear Transceiver Design

Tarik Akbudak (University of Duisburg-Essen, Germany); Andreas Czylik (Universität Duisburg-Essen, Germany)

pp. 5624-5629

16:30 Game Theoretic Network Coding-aided MAC for Data Dissemination towards Energy Efficiency

Angelos Antonopoulos (Telecommunications Technological Centre of Catalonia (CTTC), Spain); Christos Verikoukis (Telecommunications Technological Centre of Catalonia, Spain)
pp. 5630-5634

16:45 Variational-distance-based Modulation Classifier

Fanggang Wang (Beijing Jiaotong University, P.R. China); Chung Chan (The Chinese University of Hong Kong, Hong Kong)
pp. 5635-5639

17:00 Diversity Analysis of Two-Way MIMO Relaying System Based on Zero-Forcing

Hang Long (Beijing University of Posts & Telecommunications, P.R. China); Wei Xiang (University of Southern Queensland, Australia); Hongmei Liu (Beijing University of Posts and Telecommunications (BUPT), P.R. China); Shanshan Shen (Beijing University of Posts and Telecommunications, P.R. China)
pp. 5640-5644

17:15 Joint Pre-coder and Decoder Design for Physical Layer Network Coding based MIMO Two-Way Relay System

Saliya Jayasinghe (CWC, University of Oulu, Finland); Nandana Rajatheva (University of Oulu, Finland); Matti Latva-aho (UoOulu, Finland)
pp. 5645-5649

Workshops

- IEEE ICC 2012 - Ad-hoc and Sensor Networking Symposium (ICC'12 AHSN): [Program](#); [Committees](#)
- IEEE ICC 2012 - Communication and Information Systems Security Symposium (ICC'12 CISS): [Program](#); [Committees](#)
- IEEE ICC 2012 - Communication QoS, Reliability and Modeling Symposium (ICC'12 CQRM): [Program](#); [Committees](#)
- IEEE ICC 2012 - Cognitive Radio and Networks Symposium (ICC'12 CRN): [Program](#); [Committees](#)
- IEEE ICC 2012 - Communication Software Services and Multimedia Applications Symposium (ICC'12 CSSMA): [Program](#); [Committees](#)
- IEEE ICC 2012 - Communications Theory (ICC'12 CT): [Program](#); [Committees](#)
- IEEE ICC 2012 - Next-Generation Networking Symposium (ICC'12 NGN): [Program](#); [Committees](#)
- IEEE ICC 2012 - Optical Networks and Systems (ICC'12 ONS): [Program](#); [Committees](#)
- IEEE ICC 2012 - Selected Areas in Communications Symposium (ICC'12 SAC): [Program](#); [Committees](#)
- IEEE ICC 2012 - Signal Processing for Communications Symposium (ICC'12 SPC): [Program](#); [Committees](#)
- IEEE ICC 2012 - Wireless Communications Symposium (ICC'12 WCS): [Program](#); [Committees](#)
- IEEE ICC 2012 - Wireless Networks Symposium (ICC'12 WN): [Program](#); [Committees](#)
- Workshop on Advances in Mobile Networking (ICC'12 WS - AMN): [Program](#); [Committees](#)
- Workshop on Clouds, Networks and Data Centers (ICC'12 WS - CloudNetsDataCenters): [Program](#); [Committees](#)
- Workshop on Cooperative and Cognitive Mobile Networks (ICC'12 WS - CoCoNet 4): [Program](#); [Committees](#)
- Workshop on Convergence among Heterogeneous Wireless Systems in Future Internet (ICC'12 WS - CONWIRE): [Program](#); [Committees](#)
- Workshop On Energy Efficiency in Wireless Networks & Wireless Networks for Energy Efficiency (ICC'12 WS - E2Nets): [Program](#); [Committees](#)
- International Workshop on Energy Harvesting for Communication (ICC'12 WS - EHC): [Program](#); [Committees](#)
- International Workshop on the Network of the Future (ICC'12 WS - FutureNet): [Program](#); [Committees](#)
- IEEE ICC'12 Workshop on Green Communications and Networking (ICC'12 WS - GCN): [Program](#); [Committees](#)
- IEEE ICC 2012 Workshop on Cognitive Radio and Cooperation for Green Networking (ICC'12 WS - Greennetworking): [Program](#); [Committees](#)
- Long Term HSPA Evolution (ICC'12 WS - LTHE): [Program](#); [Committees](#)
- International Workshop on Mobile Consumer Health Care Networks, Systems and Services (ICC'12 WS - MobiCHeSS): [Program](#); [Committees](#)
- International Workshop on Molecular and Nanoscale Communications (ICC'12 WS - MoNaCom): [Program](#); [Committees](#)
- New Trends in Optical Networks Survivability (ICC'12 WS - netsurviv): [Program](#); [Committees](#)
- International Workshop on Novel approaches to Energy Measurement and Evaluation in Wireless Networks (ICC'12 WS - NovaEnEv): [Program](#); [Committees](#)
- Re-think ICT infrastructure designs and operations (ICC'12 WS - RIDO): [Program](#); [Committees](#)
- Workshop on Radar and Sonar Network (ICC'12 WS - RSN): [Program](#); [Committees](#)
- 3rd IEEE International Workshop on SmArT COmmunications in NETwork Technologies (ICC'12 WS - SaCoNet-III): [Program](#); [Committees](#)
- 2nd IEEE International Workshop on Smart Communication Protocols and Algorithms (ICC'12 WS - SCPA): [Program](#); [Committees](#)
- Software Defined Networks (ICC'12 WS - SDN): [Program](#); [Committees](#)

- First IEEE International Workshop on Security and Forensics in Communication Systems (ICC'12 WS - SFCS): [Program](#); [Committees](#)
- International Workshop on Small Cell Wireless Networks 2012 (ICC'12 WS - SmallNets): [Program](#); [Committees](#)
- Workshop on Telecommunications: From Research to Standards (ICC'12 WS - Standards): [Program](#); [Committees](#)
- Emerging Data Storage Technologies (ICC'12 WS - Storage): [Program](#); [Committees](#)
- Third IEEE Workshop on User-Centric Networking (ICC'12 WS - U-NET): [Program](#); [Committees](#)
- Realizing Advanced Video Optimized Wireless Networks (ICC'12 WS - ViOpt): [Program](#); [Committees](#)
- Wireless Sensor Actor and Actuator Networks (ICC'12 WS - WiSAAN): [Program](#); [Committees](#)
- Intelligent Vehicular Networking: V2V/V2I Communications and Applications (ICC'12 WS - WIVN): [Program](#); [Committees](#)