

IEEE LANMAN 2016

THE 22ND IEEE INTERNATIONAL SYMPOSIUM ON LOCAL AND METROPOLITAN AREA NETWORKS

June 13 - 15, 2016 Rome

DETAILED PROGRAMME

Time		Event
09:00	09:15	Opening Session
09:15	10:30	Keynote 1: Stefano Previdi, Cisco Systems, USA
10:30	10:55	Coffee Break
10:55	13:00	<p style="text-align: center;">Session 1: SDN and NFV</p> <ol style="list-style-type: none">Self-Configuring Real-Time Communication Network based on OpenFlow <i>Peter Heise (Airbus Group; University of Siegen); Marc Lasch (Airbus Group); Fabien Geyer (Airbus Group; Technische Universität München); Roman Obermaisser (University of Siegen).</i>Invited Paper: Better ARP handling with InSPired SDN switches. <i>Fabian Schneider (NEC Laboratories Europe); Roberto Bifulco (NEC Laboratories Europe); Anton Masiuk (NEC Laboratories Europe).</i>Towards Application Driven Networking <i>Francklin S. Tegueu (LAAS-CNRS, Université de Toulouse); Slim Abdellatif (LAAS-CNRS, Université de Toulouse); Thierry Villemur (LAAS-CNRS, Université de Toulouse); Pascal Berthou (LAAS-CNRS, Université de Toulouse); Thierry Plesse (Directorate General of Armaments).</i>A General Constrained Shortest Path Approach for Virtual Path Embedding <i>Dmitrii Chemodanov (University of Missouri-Columbia, USA); Prasad Callyam (University of Missouri-Columbia, USA); Flavio Esposito (University of Missouri-Columbia, USA); Andrei Sukhov (Samara State Aerospace University, Russia).</i>Invited paper: 5G Exchange for inter-domain resource sharing

Csaba Simon (Budapest University of Technology and Economics); Markosz Maliosz (Budapest University of Technology and Economics); József Bíró (Budapest University of Technology and Economics); Balázs Gerő (Ericsson Research); András Kern (Ericsson Research).

13:00 14:15

Lunch Break

Poster Session

1. **High-speed uploading architecture using distributed edge servers on multi-RAT heterogeneous networks**

Kazuhiro Tokunaga (Nippon Telegraph and Telephone Corp.); Kenichi Kawamura (Nippon Telegraph and Telephone Corp.); Naoki Takaya (Nippon Telegraph and Telephone Corp.)

2. **Enhancement of 60 GHz Transmission over 802.11ad Using Specular Reflection**

Adewale Abe (University of Essex); Stuart D. Walker (University of Essex).

3. **OpenStack-based Clouds as Holons: A Functional Perspective**

Iustin-Alexandru Ivanciu (Technical University of Cluj-Napoca, Romania); Eduard Luchian (Technical University of Cluj-Napoca, Romania); Etienne Riviere (University of Neuchatel, Switzerland); Virgil Dobrota (Technical University of Cluj-Napoca, Romania).

14:15 15:15

4. **Scalable, Network-assisted Congestion Control for the MobilityFirst Future Internet Architecture**

Kai Su (Rutgers University); K. K. Ramakrishnan (University of California, Riverside); Dipankar Raychaudhuri (Rutgers University).

5. **Secure Connection Assistance Architecture for IoT Devices**

Mika Mori (Nippon Telegraph and Telephone Corp.); Yoshiko Sueda (Nippon Telegraph and Telephone Corp.); Masao Aihara (Nippon Telegraph and Telephone Corp.)

6. **Architecture and Characteristics of Social Network Based Ad Hoc Networking**

Satoka Fujii (Ochanomizu University); Tutomu Murase (Nagoya University); Masato Oguchi (Ochanomizu University); Eng Keong Lua (SingTel Enterprise Security).

7. **OpenFlow Transparent Custom Action Extension by Using Packet-In and Click Packet Processing**

		<p><i>Shogo Ando (The University of Tokyo); Nakao Akihiro (The University of Tokyo).</i></p> <p>8. Dropping information for feedback-controlled IoT devices</p> <p><i>Naoki Higo (Nippon Telegraph and Telephone Corp.); Yoshiko Sueda (Nippon Telegraph and Telephone Corp.); Takumi Ohba (Nippon Telegraph and Telephone Corp.); Arata Koike (Nippon Telegraph and Telephone Corp.).</i></p>
15:15	15:45	Coffee Break
15:45	17:00	<p style="text-align: center;">Session 2: Measurement and Monitoring</p> <p>1. How and How Much Traceroute Confuses Our Understanding of Network Paths</p> <p><i>Pietro Marchetta (University of Napoli "Federico II"); Antonio Montieri (NM2 srl); Valerio Persico (University of Napoli "Federico II"); Antonio Pescapè (University of Napoli "Federico II"); Ítalo Cunha (Universidade Federal de Minas Gerais); Ethan Katz-Bassett (University of Southern California).</i></p> <p>2. Network Measurement Recommendations for Performance Bottleneck Correlation Analysis</p> <p><i>Yuanxun Zhang (University of Missouri-Columbia); Saptarshi Debroy (University of Missouri-Columbia); Prasad Calyam (University of Missouri-Columbia).</i></p> <p>3. <u>Invited paper</u>: Very high speed link emulation with TLEM</p> <p><i>Luigi Rizzo (Universita` di Pisa); Giuseppe Lettieri (Università di Pisa); Vincenzo Maffione (Università di Pisa).</i></p>

Day 2 - Tuesday June 14, 2016

Time		Event
09:15	10:30	Keynote 2: Holger Karl, University of Paderborn - Germany
10:30	10:55	Coffee Break
10:55	13:00	<p style="text-align: center;">Session 3: Wireless Networks</p> <p>1. <u>Invited Paper:</u> High Data Rate Ultrasonic Communications for Wireless Intra-body Networks</p> <p><i>Emrecan Demirors (Northeastern University); Giovanni Alba (Politecnico di Milano); G. Enrico Santagati (Northeastern University); Tommaso Melodia (Northeastern University).</i></p> <p>2. Impact of the LTE Scheduler on achieving Good QoE for DASH Video Streaming</p> <p><i>Ahmed H. Zahran (University College Cork); Jason J. Quinlan (University College Cork); Cormac J. Sreenan (University College Cork); K.K. Ramakrishnan (University of California, Riverside).</i></p> <p>3. Understanding the Impact of AP Density on WiFi Performance Through Real-World Deployment</p> <p><i>Kaixin Sui (Tsinghua University); Siqi Sun (Tsinghua University); Yousef Azzabi (Tsinghua University); Xiaoping Zhang (Tsinghua University); Youjian Zhao (Tsinghua University); Jilong Wang (Tsinghua University); Zimu Li (Tsinghua University); Dan Pei (Tsinghua University).</i></p> <p>4. A Device-to-Device Service Sharing Middleware for Heterogeneous Wireless Networks</p> <p><i>Mostafizur Rahman (University of Nevada, Reno); Sandeep Mathew (University of Nevada, Reno); Murat Yuksel (University of Nevada, Reno); Shamik Sengupta (University of Nevada, Reno).</i></p> <p>5. Service centric mobility management for improving Quality of Experience toward future mobile network</p> <p><i>Yoshiko Sueda (Nippon Telegraph and Telephone Corp.); Arata Koike (Nippon Telegraph and Telephone Corp.)</i></p>
13:00	14:15	Lunch Break
14:15	15:15	<p style="text-align: center;">Demo Session</p> <p>1. Revisiting Open eXchange Points with Software Defined Networking</p>

Pier Luigi Ventre (GARR/Univ. of Rome Tor Vergata); Bojan Jakovljevic (AMRES); David Schmitz (Leibniz Supercomputing Centre); Stefano Salsano (CNIT/Univ. of Rome Tor Vergata); Matteo Gerola (CREATE-NET); Luca Prete (ONLab); Sebastiano Buscaglione (GEANT); Jose Aznar (i2Cat); Kostas Stamos (GRNET).

2. Low Latency Packet Transport Methods for Remote-controlled Devices in Multi-RAT Environments

Hiromi Hirai (NTT Network Technology Laboratories); Takuya Tojo, Minoru Matsumoto (NTT Network Technology Laboratories); Naoki Takaya (NTT Network Technology Laboratories).

3. D-LiTE: A platform for evaluating DASH performance over a simulated LTE network

Jason J. Quinlan (Dept. of Computer Science, University College Cork); Darijo Raca (Dept. of Computer Science, University College Cork); Ahmed H. Zahran (Dept. of Electronics and Electrical Communications, Cairo University); Ahmed Khalid (Dept. of Computer Science, University College Cork); K.K. Ramakrishnan (Dept. of Computer Science and Engineering, University of California, Riverside); Cormac J. Sreenan (Dept. of Computer Science, University College Cork).

4. OpenNetVM: Flexible, High Performance NFV (LANMAN Demo)

Wei Zhang (The George Washington University); Guyue Liu (The George Washington University); Wenhui Zhang (The George Washington University); Neel Shah (The George Washington University); Phil Lopreiato (The George Washington University); Gregoire Todeschi (INP ENSEEIHT); K. K. Ramakrishnan (University of California Riverside); Timothy Wood (The George Washington University).

5. A demo of a PaaS for IoT Applications Provisioning in Hybrid Cloud/Fog Environment

Ons Bibani (Concordia Institute for Information Systems Engineering, Concordia University, Montreal); Sami Yangui (Concordia Institute for Information Systems Engineering, Concordia University, Montreal); Roch H. Glitho (Concordia Institute for Information Systems Engineering, Concordia University, Montreal); Walid Gaaloul (Concordia Institute for Information Systems Engineering, Concordia University, Montreal); Nejib Ben Hadj-Alouane (National Engineering School of Tunis, OASIS, University of Tunis El Manar); Monique J. Morrow (Cisco systems, Zurich); Paul A. Polakos (Cisco systems, New York)

15:15	15:45	Coffee Break
15:45	17:25	Session 4: Cloud & Virtualization

1. Invited Paper: OpenStack networking for humans: symbolic execution to the rescue

Radu Stoenescu (University Politehnica of Bucharest); Dragos Dumitrescu (University Politehnica of Bucharest); Costin Raiciu (University Politehnica of Bucharest).

2. A Platform as-a-Service for Hybrid Cloud/Fog Environments

Sami Yangui (Concordia University); Pradeep Ravindran (Concordia University); Ons Bibani (Telecom SudParis); Roch H. Glitho (Concordia University); Nejib Ben Hadj Alouane (University of Tunis El Manar); Monique Morrow (Cisco systems); Paul Polakos (Cisco systems).

3. Flexible Virtual Machine networking using netmap passthrough

Vincenzo Maffione (Università di Pisa); Luigi Rizzo (Università di Pisa); Giuseppe Lettieri (Università di Pisa).

4. An IoT Control Plane model and its impact analysis on a virtualized MME for Connected Cars

Rennie Archibald (AT&T); Dhruv Gupta (AT&T); Rittwik Jana (AT&T Labs); Vijay Gopalakrishnan (AT&T Labs); Ashok Sunder Rajan (Intel); Kannan Babu Ramia (Intel); Dan Dahle (Intel); Jacob Cooper (Intel); George Kennedy (Intel); Nikhil Rao (Intel); Shantkumar Sonnads (HCL); Martin Mc Donald (ng4T).

Day 3 - Wednesday June 15, 2016

Time	Event
09:15 10:30	<p style="text-align: center;">Session 5: Transport & Services</p> <p>1. Name-based Push/Pull Message Dissemination for Disaster Message Board</p> <p><i>Atsushi Tagami (KDDI R&D Laboratories, Inc.); Tomohiko Yagyu (NEC Corporation); Kohei Sugiyama (KDDI R&D Laboratories, Inc.); Mayutan Arumathurai (University of Goettingen); Kenichi Nakamura (Panasonic Corporation); Toru Hasegawa (Osaka University); Tohru Asami (The University of Tokyo); K. K. Ramakrishnan (University of California, Riverside).</i></p> <p>2. Towards a Flexible Internet Transport Layer Architecture</p> <p><i>Karl-Johan Grinnemo (Karlstad University, Karlstad); Tom Jones (University of Aberdeen, Aberdeen); Gorry Fairhurst (University of Aberdeen, Aberdeen); David Ros (Simula Research Laboratory, Fornebu); Anna Brunstrom (Karlstad University, Karlstad); Per Hurtig (Karlstad University, Karlstad).</i></p> <p>3. Distributed Communication Model-Learning Architecture for Anomaly Detection in Multi-service Shared M2M Area Networks</p> <p><i>Nobuhiro Azuma (Nippon Telegraph and Telephone Corp.); Toshimitsu Tsubaki (Nippon Telegraph and Telephone Corp.); Masao Aihara (Nippon Telegraph and Telephone Corp.)</i></p>
10:30 10:55	Coffee Break
10:55 13:00	<p style="text-align: center;">Session 6: Information Centric Networking</p> <p>1. Opportunistic Off-Path Content Discovery in Information-Centric Networks</p> <p><i>Onur Ascigil (University College London); Vasilis Sournalas (University College London); Ioannis Psaras (University College London); George Pavlou (University College London).</i></p> <p>2. Green Growth in NDN: Deployment of Content Stores</p> <p><i>Eliau Aubry (Université de Lorraine); Thomas Silverston (The University of Tokyo); Isabelle Chrisment (Université de Lorraine).</i></p>

3. Congestion Control in Named Data Networking

Daichi Tanaka (University of Tsukuba); Masatoshi Kawarasaki (University of Tsukuba).

4. Comparison of Naming Schema in ICN

Sripriya S. Adhatarao (University of Goettingen); Jiachen Chen (WINLAB, Rutgers University); Mayutan Arumaithurai (University of Goettingen); Xiaoming Fu (University of Goettingen); K.K. Ramakrishnan (University of California, Riverside).

5. Name Anomaly Detection for ICN

Daishi Kondo (Université de Lorraine); Thomas Silverston (The University of Tokyo); Hideki Tode (Osaka Prefecture University); Tohru Asami (The University of Tokyo); Olivier Perrin (Université de Lorraine).

13:00

14:15

Lunch Break