ITC 28 Program

Program of the
28th International Teletraffic Congress

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(ITC 28 TPC Co-Chairs)

Version of Thursday 7th July, 2016
Tuesday 13th September, 2016

09:00 – 09:30 Opening by Phuoc Tran-Gia

09:30 – 10:30 **Keynote** by Nikhil Jain (Qualcomm Technologies)
*Internet of Everything: Engineering Challenges and Opportunities*

10:30 – 11:00 Coffee break

11:00 – 12:20 **Session 1.A: Clouds and Data Centers**

*Offering Resilient and Bandwidth Guaranteed Services in Multi-Tenant Cloud Networks: Harnessing the Sharing Opportunities* by Hyame Alameddine; Sara Ayoubi; Chadi Assi

*Dynamic Virtual Network Traffic Engineering with Energy Efficiency in Multi-Location Data Center Networks* by Mirza Mohd Shahriar Maswood; Chris Develder; Edmundo Madeira; Deep Medhi

*An Energy-Aware Embedding Algorithm for Virtual Data Centers* by Manh Nam Tran; Nguyen Van Huynh; Dai Le; Nguyen Huu Thanh

**Session 1.B: Traffic and Network Management**

*Disaster Avoidance Control Against Tsunami* by Phuong Nga Tran; Hiroshi Saito

*Building a Low Latency Linux Software Router* by Alexander Beifuß; Torsten M. Runge; Daniel Raumer; Paul Emmerich; Bernd E. Wölfinger; Georg Carle

*Traffic-Driven Implicit Buffer Management - Delay Differentiation Without Traffic Contracts* by Martin Karsten; Daniel S Berger; Jens Schmitt

12:20 – 13:45 Lunch

13:45 – 15:15 **Session 2: Wireless**

*Full Demo 1: Self-Optimization of Software Defined Radios Through Evolutionary Algorithms* by Muhammed Zubair Basha Shaik; André Puschmann; Andreas Mitschele-Thiel

*Opportunistic Channel Estimation for Implicit 802.11af MU-MIMO* by Ryan Guerra; Narendra Anand; Clayton Shepard; Edward W. Knightly

*DiVote: A Distributed Voting Protocol for Mobile Device-to-Device Communication* by Peter Danielis; Sylvia T. Kouyoundjieva; Gunnar Karlsson

15:15 – 15:45 Coffee break
Tuesday 13th September, 2016 (cont.)

15:45 – 17:05 **Session 3.A: Cellular**

*Joint Optimization of User Association and User Satisfaction in Heterogeneous Cellular Networks* by Farah Moety; Mustapha Bouhtou; Taoufik En-Najjary; Ridha Nasri

*Joint Resource Allocation and User Association for Heterogeneous Cloud Radio Access Networks* by Ying Loong Lee; Li-Chun Wang; Teong Chee Chuah; Jonathan Loo

*Performance-Oriented Association in Large Cellular Networks with Technology Diversity* by Abishek Sankararaman; Jeong-woo Cho; Francois Baccelli

**Session 3.B: Video Streaming**

*Bridging the Gap Between QoE and User Engagement in HTTP Video Streaming* by Christian Moldovan; Florian Metzger

*A Markov Model for Evaluating Resource Sharing Policies for DASH Assisting Network Elements* by Jan Willem Kleinrouweler; Sergio Cabrero; Rob van der Mei; Pablo Cesar

*Mobile Live Video Upstreaming* by Philip Lundrigan; Mojgan Khaledi; Makito Kano; Naveen Subramanyam; Sucha Kumar Kasera

18:30 – 20:00 **Welcome Reception**
Wednesday 14th September, 2016

09:00 – 10:00 **Keynote** by Wolfgang Kellerer (Technical University of Munich, Germany)
Towards Flexible Networking in Dynamically Changing Environments

10:00 – 10:30 Full Demo 2: *PlanetIgnite: A Self-Assembling, Lightweight, Infrastructure-as-a-Service Edge Cloud* by Andy Bavier; Rick McGeer; Glenn Ricart

10:30 – 11:00 Coffee break

11:00 – 12:20 **Session 4.A: Caching Strategies**
Dynamic Cache Partitioning for Encrypted Content Delivery by Andrea Araldo; György Dan; Dario Rossi
Access-time Aware Cache Algorithms by Giovanni Neglia; Damiano Carra; Mingdong Feng; Vaishnav Janardhan; Pietro Michiardi; Dimitra Tsigkari
Asymptotically Exact TTL-Approximations of the Cache Replacement Algorithms LRU(m) and h-LRU by Nicolas Gast; Benny Van Houdt

**Session 4.B: Performance Analysis**
Meeting Soft Deadlines in Single-And Multi-Server Systems by Esa Hyytiä; Rhonda Righter; Jorma Virtamo
Performance Analysis of CoDel and PIE for Saturated TCP Sources by Fabian Schwarzkopf; Sebastian Veith; Michael Menth
Stochastic Upper and Lower Bounds for General Markov Fluids by Florin Ciucu; Felix Poloczek; Jens Schmitt

12:20 – 13:45 Lunch

13:45 – 15:15 **Session 5: Demo Session**
Demo: Integrating Distributed High-Performance Zones in the BelWue ISP Network and University Campuses Using OpenFlow by Mark Schmidt; Robert Finze; Michael Menth
Demonstrating a Personalized Secure-By-Default Bring Your Own Device Solution Based on Software Defined Networking by Steffen Gebert; Thomas Zinner; Nicholas Gray; Raphael Durner; Claas Lorenz; Stanislav Lange
Demonstrating Context-Aware Services in the MobilityFirst Future Internet Architecture by Francesco Bronzino; Dipankar Raychaudhuri; Ivan Seskar
jLISP: An Open, Modular and Extensible Java-Based LISP Implementation by Andreas Stockmayer; Mark Schmidt; Michael Menth
Network as a Service - A Demo on 5G Network Slicing by Rastin Pries; Hans-Jochen Morper; Nandor Galambosi; Michael Jarschel
Security of Distributed Container Based Service Clustering with Hypriot Cluster Lab by Marcel Gromann; Andreas Eiermann

15:15 – 15:45 Coffee break
Wednesday 14th September, 2016 (cont.)

15:45 – 17:05 **Session 6.A: Softwarization**
*Sector: TCAM Space Aware Routing on SDN* by Sai Qian Zhang; Qi Zhang; Ali Tizghadam; Byungchul Park; Hadi Bannazadeh; Alberto Leon-Garcia; Raouf Boutaba

*Port Based Capacity Extensions (PBCEs): Improving SDNs Flow Table Scalability* by Robert Bauer; Martina Zitterbart

*Performance Modeling of Softwarized Network Functions Using Time Discrete Analysis* by Steffen Gebert; Thomas Zinner; Stanislav Lange; Christian Schwartz; Phuoc Tran-Gia

**Session 6.B: Information and Social Networks**

*Cache the Queues: Caching and Forwarding in ICN From a Congestion Control Perspective* by Dinh Nguyen; Kohei Sugiyama; Atsushi Tagami

*Optimizing Time to Exhaustion in Service Providers Using Information-Centric Networking* by Ali Shariat; Ali Tizghadam; Alberto Leon-Garcia

*Binary Opinion Dynamics with Biased Agents and Agents with Different Degrees of Stubbornness* by Arpan Mukhopadhyay; Ravi R Mazumdar; Rahul Roy

19:00 – 23:00 **Social Event**
Thursday 15th September, 2016

09:00 – 10:00 **Keynote** by Eitan Altman (INRIA Sophia Antipolis, France)
*Dynamic Games for Analyzing Competition in the Internet*

10:00 – 10:30 Full Demo 3: *LiveTalk: A Framework for Collaborative Browser-Based Replicated-Computation Applications* by Matthew Hemmings; Daniel Ingalls; Robert Krahn; Rick McGeer; Glenn Ricart; Marko Röder; Ulrike Stege

10:30 – 11:00 Coffee break

11:00 – 12:20 **Session 7.A: Measurements**
*IntegraTag: a Framework for High-Fidelity Web Client Measurement* by Charles Thomas; Jeff Kline; Paul Barford
*CLUE: Clustering for Mining Web URLs* by Andrea Morichetta; Enrico Bocchi; Hassan Metwalley; Marco Mellia
*Testing for Traffic Differentiation with ChkDiff: The Downstream Case* by Riccardo Ravaioli; Guillaume Urvoy-Keller; Chadi Barakat

12:20 – 13:45 Lunch

13:45 – 15:15 **Session 8: Virtualization**
*A Power Efficient and Robust Virtual Network Functions Placement Problem* by Antonio Marotta; Andreas J. Kassler
*Elastic Network Service Provisioning with VNF Auctioning* by Mathis Obadia; Jean-Louis Rougier; Luigi Iannone; Mathieu Bouet; Vania Conan

15:15 – 15:45 Closing Session
The International Advisory Committee (IAC) of the ITC has decided to offer a number of travel grants that will be available to support full-time students for attending ITC 28. The IAC financially supports three prestigious awards for ITC 28: Best Paper Award, Best Student Paper Award, Best Demo Award.

Technical Sponsors

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