

## Detailed Program (Tentative)

**Sunday, 26 November, 2017**

**Workshops (ICQT, ManSDN/NFV)**

**Monday, 27 November, 2017**

**9:30-10:30 Mini-Conference Keynote Speech**

**11:00-12:30 Mini-Conference Session 1**

Applicability and Limitations of a Simple WiFi Hotspot Model for Cities,

M. Seufert (University of Würzburg, Germany),

C. Moldovan (University of Duisburg-Essen, Germany),

V. Burger (University of Wuerzburg, Germany),

T. Hoßfeld (University of Duisburg-Essen, Germany)

Wireless LAN Access Point Deployment and Pricing with Location-Based Advertising,

C. Zhang (Waseda University, Japan),

Z. Liu (Shizuoka University, Japan),

Bo Gu (Kogakuin University, Japan),

K. Yamori (Asahi University, Japan),

Y. Tanaka (Waseda University, Japan)

Two-way Communication with Wait-slot Scheme for Neighbor Discovery Process in Dense Bluetooth Low Energy Networks,

T. T. Yang (National Chung-Hsing University, Taiwan),

T. Hsueh-Wen (National Chung-Hsing University, Taiwan)

High-end LTE Service Evolution in Korea: 4 Years of Nationwide Mobile Network Measurements,

J. Hyun (POSTECH, Korea),

Y. Won (Hanyang University, Korea),

K. Cho (III, Japan),

R. Fontugne (Internet Initiative Japan Inc., Japan),

J. Chung (Princeton University, USA),

J. Hong (POSTECH, Korea)

## **14:00-15:30 Mini-Conference Session 2**

An Adaptive Scaling Mechanism for Managing Performance Variations in Network Functions Virtualization,

C. Tobar Arteaga (University of Cauca, Colombia),

F. Risso (Politecnico di Torino, Italy),

O. M. Caicedo Rendon (University of Cauca, Colombia)

Delay-aware VNF Placement and Chaining based on a Flexible Resource Allocation Approach,

A. Alleg (CNRS-LaBRI UMR 5800, University Bordeaux, Bordeaux-INP, France),

T. Ahmed (CNRS-LaBRI UMR 5800, University Bordeaux, Bordeaux-INP, France),

M. Mosbah (Bordeaux INP - University of Bordeaux & LaBRI, France),

R. Riggio (FBK CREATE-NET, Italy),

R. Boutaba (University of Waterloo, Canada)

MD-IDN: Multi-Domain Intent-Driven Networking in Software-Defined Infrastructures,

S. Arezoumand (University of Toronto, Canada),

K. Dzevaroska (University of Toronto, Canada),

H. Bannazadeh (University of Toronto, Canada),

A. Leon-Garcia (University of Toronto, Canada)

Efficient Big Link Allocation Scheme in Virtualized Software-defined Networking,

W. Jeong (Korea University, Korea),

G. Yang (Korea University, Korea),

S. M. Kim (Korea University, Korea),

C. Yoo (Korea University, Korea)

BFD-based Link Latency Measurement in Software Defined Networking,

S. M. Kim (Korea University, Korea),

G. Yang (Korea University, Korea),

C. Yoo (Korea University, Korea),

S. G. Min (Korea University, Korea)

## **16:00-17:30 Mini-Conference Session 3**

Can MPTCP Secure Internet Communications from Man-in-the-Middle Attacks?,

D. Nguyen (UPMC, France),

D. C. Phung (LIP6, France),

S. Secci (University Pierre et Marie Curie - Paris 6, France),

B. Felix (UFPR, Brazil),

M. Nogueira (Federal University of Parana (UFPR), Brazil)

A lightweight snapshot-based DDoS detector,

G. Roudière (LAAS-CNRS, France),

P. Owezarski (LAAS-CNRS, France)

Assessing the Value of Containers for NFVs: A Detailed Network Performance Study,

J. Struye (University of Antwerp, Belgium),

B. Spinnewyn (University of Antwerp & iMinds, Belgium),

K. Spaey (iMinds / University of Antwerp, Belgium),

K. Bonjean (Newtec, Belgium),

S. Latrè (University of Antwerp - imec, Belgium)

Modeling and Analyzing Power System Failures on Cloud Services,

D. Rosendo (Federal University of Pernambuco, Brazil),

P. Endo (University of Pernambuco, Brazil),

G. Leoni (Federal University of Pernambuco, Brazil),

D. Gomes (Federal University of Pernambuco, Brazil),

G. Gonçalves (Federal Rural University of Pernambuco, Brazil),

A. Moreira (Federal University of Pernambuco, Brazil),

J. Kelner (Federal University of Pernambuco, Brazil),

D. Sadok (Federal University of Pernambuco, Brazil),

M. Mahloo (Ericsson Research, Sweden)

Tracking the Bad Guys: An Efficient Forensic Methodology To Trace Multi-step Attacks Using Core Attack Graphs,

M. Barrère (Imperial College London, United Kingdom (Great Britain)),

R. Vieira Steiner (Imperial College London, United Kingdom (Great Britain)),

R. Mohsen (Imperial College London, United Kingdom (Great Britain)),

E. Lupu (Imperial College, United Kingdom (Great Britain))

## **Tuesday, 28 November, 2017**

### **9:30-10:30 Keynote Speech 1**

### **10:30-11:30 Poster Session 1**

Enforcing free roaming among EU countries: an economic analysis,

P. Maillé (IMT Atlantique, France),

B. Tuffin (Inria Rennes - Bretagne Atlantique, France)

Resource-Aware Placement of Softwarised Security Services in Cloud Data Centers,

A. Ali (University of Glasgow, United Kingdom (Great Britain)),

C. Anagnostopoulos (University of Glasgow, United Kingdom (Great Britain)),

D. Pezaros (University of Glasgow, United Kingdom (Great Britain))

A Path Planning Method of Wireless Sensor Networks Based on Service Priority,

P. Li (Beijing University of Posts and Telecommunications, P.R. China),

S. Xu (Beijing University of Posts and Telecommunications, P.R. China),

K. Sun (Beijing University of Posts and Telecommunications, P.R. China),

Q. Xue-song (Beijing University of Posts and Telecommunications, P.R. China),

F. Qi (Beijing University of Posts and Telecommunications, P.R. China)

An Autonomic and Policy-based Authorization Framework for OpenFlow Networks,

D. Rosendo (Federal University of Pernambuco, Brazil),

P. Endo (University of Pernambuco, Brazil),

D. Sadok (Federal University of Pernambuco, Brazil),

J. Kelner (Federal University of Pernambuco, Brazil)

### **11:00-12:30 Technical Session 1**

Data Driven Selection of DRX for Energy Efficient 5G RAN,

D. Corcoran (KTH Royal Institute of Technology, Sweden),

L. Andimeh (Ericsson AB, Sweden),

A. Ermedahl (Ericsson AB, Sweden),

P. Kreuger (Swedish Institute of Computer Science (SICS), Sweden),

C. Schulte (KTH Royal Institute of Technology, Sweden)

Flexible Functional Split in 5G Networks,

D. Harutyunyan (FBK CREATE-NET, Italy),

R. Riggio (FBK CREATE-NET, Italy)

ORCHESTRA: Virtualized and Programmable Orchestration of Heterogeneous WLANs,

E. Zeljkovic (University of Antwerp - imec & IDLab, Belgium),

T. De Schepper (University of Antwerp - imec),

P. Bosch (University of Antwerp - imec),

I. Vermeulen (University of Antwerp - imec, Belgium),

J. Haxhibeqiri (Ghent University, Belgium),

J. Hoebeke (Ghent University - imec, Belgium),

J. Famaey (University of Antwerp & Imec, Belgium),

S. Latré (University of Antwerp - imec, Belgium)

## **14:00-15:30 Technical Session 2**

A Path Layer for the Internet: Enabling Network Operations on Encrypted Protocols,

M. Kuehlewind (ETH Zurich, Switzerland),

T. Buehler (ETH Zurich, Switzerland),

B. Trammell (ETH Zurich, Switzerland),

S. Neuhaus (ZHAW, Switzerland),

R. Muentener (ZHAW, Switzerland),

G. Fairhurst (University of Aberdeen, United Kingdom (Great Britain))

Real-Time Security Services for SDN-based Datacenters,

P. Varga (Budapest University of Technology and Economics, Hungary),

G. Kathareios (IBM Research - Zurich),

A. Mate (IBM Research - Zurich),

R. Clauberg (IBM Research - Zurich),

A. Anghel (IBM Research - Zurich),

P. Orosz (Budapest University of Technology and Economics, Hungary),

B. Nagy (AITIA International Inc, Hungary),

T. Tóthfalusi (Budapest University of Technology and Economics),

L. Kovács (AITIA International Inc., Hungary),

M. Gusat (IBM Research - Zurich)

Arena: adaptive real-time update anomaly prediction in cloud systems,

S. Huang (Beihang University, P.R. China),

C. Fung (Virginia Commonwealth University, USA),

S. Zhang (Beihang University, P.R. China),

G. Wei (Beihang University, P.R. China),

Z. Luan (Beihang University, P.R. China),

D. Qian (Beihang University, P.R. China)

### **15:30-16:00 Poster Session 2**

Traffic Optimization in Anonymous Networks,

P. Kristel (Slovak University of Technology in Bratislava & Faculty of Informatics and Information Technologies, Slovakia),

J. Lucansky (Slovak University of Technology in Bratislava & Faculty of Informatics and Information Technologies, Slovakia),

I. Kotuliak (Slovak University of Technology, Slovakia)

Anomaly Detection for OpenStack Services with Process-Related Topological Analysis,

T. Niwa (KDDI Research, Inc., Japan),

Y. Kasuya (KDDI Research, Inc., Japan),

T. Kitahara (KDDI Research, Inc., Japan)

Charting an Intent Driven Network,

Y. Elkhatib (Lancaster University, United Kingdom (Great Britain)),

G. Coulson (Lancaster University, United Kingdom (Great Britain))

G. Tyson (Queen Mary, University of London, United Kingdom (Great Britain)),

Adaptive and Distributed Monitoring Mechanism in Software-Defined Networks,

X. T. Phan (The Graduate University for Advanced Studies, Japan)

### **16:00-17:30 Technical Session 3**

A Software-Defined Firewall Bypass for Congestion Offloading,

F. Heimgaertner (University of Tuebingen, Germany),

M. Schmidt (University of Tuebingen, Germany),  
D. Morgenstern (University of Tuebingen, Germany),  
M. Menth (University of Tuebingen, Germany)

An adaptive mechanism for LTE P-GW virtualization using SDN and NFV,

L. Chaves (University of Campinas, Brazil),  
I. Garcia (Universidade Estadual de Campinas, Brazil),  
E. Madeira (State University of Campinas, Brazil)

An Empirical Study of Software Reliability in SDN Controllers,

P. Vizarreta (Technical University of Munich, Germany),  
K. Trivedi (Duke University, USA),  
B. Helvik (NTNU - Norwegian University of Science and Technology, Norway),  
P. Heegaard (Norwegian University of Science and Technology & NTNU, Norway),  
W. Kellerer (Technische Universität München, Germany),  
C. Mas Machuca (Technical University of Munich, Germany)

## **Wednesday, 29 November, 2017**

### **9:30-10:30 Keynote Speech 2**

### **10:30-11:30 Poster Session 3**

A Prediction-based Dynamic Resource Management Approach for Network Virtualization,

J. Li (Beijing University of Posts and Telecommunications, P.R. China),  
Y. Wang (Beijing University of Posts and Telecommunications, P.R. China),  
Z. Wu (Beijing University of Posts and Telecommunications & State Key Laboratory of Networking  
and Switching Technology, P.R. China),  
S. Feng (Beijing University of Posts and Telecommunications, P.R. China),  
Q. Xue-song (Beijing University of Posts and Telecommunications, P.R. China)

AutoFocus: Automatically Scoping the Impact of Anomalous Service Events,

R. Quinn (University of Utah, USA),  
Z. Ge (AT&T Labs - Research, USA),  
He Yan (AT&T Labs - Research, USA),  
J. Van der Merwe (University of Utah, USA)

Distributed-Collaborative Managed Dash Video Services,

K. Sahin (Koc University, Turkey),

K. Bağcı (Koc University, Turkey),

A. M. Tekalp (Koc University, Turkey)

Network-Integrated Edge Computing Orchestrator for Application Placement,

V. Karagiannis (NEC Laboratories Europe, Germany),

A. Papageorgiou (NEC Laboratories Europe, Germany)

Large-scale Antennas Analysis of Untrusted Relay System with Cooperative Jamming,

X. Tan (Huaqiao University, P.R. China),

R. Zhao (Huaqiao University, P.R. China),

Y. Li (HuaQiao University, P.R. China)

#### **11:00-12:30 Technical Session 4**

Resource Provisioning for IoT application services in Smart Cities,

J. Santos (Ghent University - imec, IDLab, Belgium),

T. Wauters (Ghent University - iMinds, Belgium),

B. Volckaert (Ghent University-imec & IBBT, Belgium),

F. De Turck (Ghent University - imec, Belgium)

vFetch: Video Prefetching using Pseudo Subscriptions and User Channel Affinity in YouTube,

C. Koch (Technische Universität Darmstadt, Germany),

B. Lins (Technische Universität Darmstadt, Germany),

A. Rizk (Technische Universität Darmstadt, Germany),

R. Steinmetz (Technische Universität Darmstadt, Germany),

D. Hausheer (OVGU Magdeburg, Germany)

Scheduling Service Function Chains for Ultra-Low Latency Network Services,

H. Alameddine (Concordia University, Canada),

L. Qu (Ningbo University, P.R. China),

C. Assi (Concordia University, Canada)

#### **14:00-15:30 Technical Session 5**

Measuring Exposure in DDoS Protection Services,

M. Jonker (University of Twente, The Netherlands),

A. Sperotto (Twente University, The Netherlands)

Android Malicious Application Detection Using Support Vector Machine and Active Learning,

B. Rashidi (Virginia Commonwealth University, USA),

C. Fung (Virginia Commonwealth University, USA),

E. Bertino (Purdue University, USA)

Attacking Strategies and Temporal Analysis Involving Facebook Discussion Groups,

C. M. Lai (University of California, Davis, USA),

X. Wang (University of California, Davis, USA),

Y. Hong (UC Davis, Davis California, USA),

Y. C. Lin (University of California, Davis, USA),

S. F. Wu (University of California, Davis, USA)

#### **15:30-16:00 Poster Session 4**

A Model-based Application Autonomic Manager with Fine Granular Bandwidth Control,

N. Beigi (York University, Canada),

M. Shtern (York University, Canada),

M. Litoiu (York University, Canada)

Risk Prediction of the SCADA Communication Network Based on Entropy-Gray Model,

M. Li (Beijing University of Posts and Telecommunications, P.R. China),

Li Wenjing (Beijing University of Posts and Telecommunications, P.R. China),

P. Yu (Beijing University of Posts and Telecommunications, P.R. China),

F. Zhou (Beijing University of Posts and Telecommunications, P.R. China)

Connectivity Extraction in Cloud Infrastructures,

P. Mensah (Nokia Bell Labs & Centrale Supélec Rennes - Inria, France),

E. Totel (Centrale Supélec Rennes, France),

S. Dubus (Nokia Bell Labs, France),

W. Kanoun (Nokia Bell Labs, France),

C. Morin (INRIA & IRISA, France),

G. Piolle (Centralesupélec & Inria, France)

Enhanced Fast BSS Transition on Enterprise WLAN with SDN-based Distribution System,

H. Hwang (Graduate School, Yeungnam University, Korea),

Y. T. Kim (Yeungnam University, Korea)

### **16:00-17:30 Technical Session 6**

Fill-in the Gaps: Spatial-Temporal Models for Missing Data,

Ji Xue (College of William and Mary, USA),

B. Nie (College of William and Mary, USA),

E. Smirni (College of William and Mary, USA)

Programmable Residual Defined Networks for Edge Data Centres,

M. Martinello (Federal University of Espirito Santo, Brazil),

A. Liberato (Federal Institute of Science and Technology of Espirito Santo, Brazil),

A. Beldachi (University of Bristol, United Kingdom (Great Britain)),

K. Kondepu (Scuola Superiore Sant'Anna, Italy),

R. Gomes (UFES, Brazil),

R. Villaca (Federal University of Espirito Santo (UFES), Brazil),

M. Ribeiro (Federal University of Espirito Santo, Brazil),

Y. Yan (University of Bristol, United Kingdom (Great Britain)),

E. Hugues-Salas (University of Bristol, United Kingdom (Great Britain)),

D. Simeonidou (University of Bristol, United Kingdom (Great Britain))

Cost-effective replica management in fault-tolerant cloud environments,

B. Spinnewyn (University of Antwerp & iMinds, Belgium),

J. F. Botero (Universidad de Antioquia, Colombia),

S. Latré (University of Antwerp - imec, Belgium)

## **Thursday, 30 November, 2017**

### **9:30-10:30 Keynote Speech 3**

### **10:30-11:30 Poster Session 5**

IPv6-specific misconfigurations in the DNS,

L. Hendriks (University of Twente, The Netherlands),

P. T. de Boer (University of Twente, The Netherlands),

A. Pras (University of Twente, The Netherlands)

Control Plane Latency Reduction for Service Chaining in Mobile Edge Computing System,

C. H. Hung (National Chiao Tung University, Taiwan),

Y. C. Hsieh (National Chiao Tung University, Taiwan),

L. C. Wang (National Chiao Tung University, Taiwan)

Identification of Communication Devices from Analysis of Traffic Patterns,

H. Kawai (Osaka City University, Japan),

S. Ata (Osaka City University, Japan),

I. Oka (Osaka City University, Japan),

N. Nakamura (OKI Electric Industry Co., Ltd., Japan)

Automated Synthesis of NFV Topology: A Security Requirement-Oriented Design,

A. h. m. Jakaria (Tennessee Technological University, USA),

M. Rahman (Tennessee Tech University, USA),

C. Fung (Virginia Commonwealth University, USA)

DPR-MAC: Dynamic Polling for Rare Events in Wireless Sensor Networks,

S. Siddiqui (Institute of Business Administration, Pakistan),

A. Khan (Institute of Business Administration, Pakistan),

M. S. Ghani (Institute of Business Administration, Pakistan)

### **11:00-12:30 Technical Session 7**

Adaptive Traffic Monitoring for Software Dataplanes,

G. Tangari (University College London),

M. Charalambides (University College London, United Kingdom (Great Britain)),

D. Tuncer (University College London, United Kingdom (Great Britain)),

G. Pavlou (University College London, United Kingdom (Great Britain))

GML Learning, A Generic Machine Learning Model for Network Measurements Analysis,

P. Casas (Austrian Institute of Technology (AIT), Austria),

J. Vanerio (Universidad de la República & ANTEL, Uruguay),  
K. Fukuda (National Institute of Informatics, Japan)

Accurate Delay Measurement for Parallel Monitoring of Probe Flows,  
K. Watabe (Nagaoka University of Technology, Japan),  
S. Hirakawa (Nagaoka University of Technology, Japan),  
K. Nakagawa (Nagaoka University of Technology, Japan)

### **14:00-15:30 Technical Session 8**

MULE: Multi-Layer Virtual Network Embedding,  
S. R. Chowdhury (University of Waterloo, Canada),  
S. Ayoubi (Concordia University, Canada),  
R. Ahmed (University of Waterloo, Canada),  
N. Shahriar (University of Waterloo, Canada),  
R. Boutaba (University of Waterloo, Canada),  
J. Mitra (Huawei Technologies Canada, Canada),  
L. Liu (Huawei Technologies Co., Ltd., P.R. China)

Reducing Latencies and Improving Fault Tolerance in NFV of 3GPP Standardized IMS,  
M. T. Raza (UCLA & Qualcomm, USA)

Evaluating the Impact of SDN-Induced Frequent Route Changes on TCP Flows,  
R. Carpa (ENS de Lyon, France)", "M. Dias de Assunção (Inria, France),  
L. Lefevre (INRIA, France),  
O. Gluck (LIP, Ens Lyon, France),  
J. C. Mignot (ENS Lyon, France)

### **15:30-16:00 Poster Session 6**

Simulation toolbox for studying energy scenarios in wired networks,  
A. C. Orgerie (CNRS & IRISA, France),  
B. Lemma Amersho (Universit? Rennes 1, France),  
T. Haudebourg (ENS de Rennes, France),  
M. Quinson (ENS Rennes),  
M. Rifai (I3S/CNRS UMR 7271 Sophia Antipolis, France),

D. Lopez Pacheco (University Nice Sophia Antipolis (UNS), France),  
L. Lefevre (INRIA, France)

Automated Selection of Offloadable Tasks for Mobile Computation Offloading in Edge Computing,

A. Zanni (University of Bologna, Italy),  
S. y. Yu (Université Pierre et Marie Curie, France),  
P. Bellavista (University of Bologna, Italy),  
R. Langar (University Paris Est Marne-la-Vallée, France),  
S. Secci (University Pierre et Marie Curie - Paris 6, France)

Network Slice Embedding under Traffic Uncertainties - A Light Robust Approach,

A. Baumgartner (Chemnitz University of Technology & Chair of Communication Networks,  
Germany),  
T. Bauschert (Chemnitz University of Technology, Germany),  
A. Alghosh Blzarour (Technische Universität Chemnitz, Germany),  
V. Reddy (Technische Universität Chemnitz, Germany)

Dynamic Algorithm Selection for the Logic of Tasks in IoT Stream Processing Systems,

E. Poormohammady (RWTH Aachen University, Germany),  
J. H. Reelfs (RWTH Aachen University, Germany),  
M. Stoffers (RWTH Aachen University, Germany),  
K. Wehrle (RWTH Aachen, Germany),  
A. Papageorgiou (NEC Laboratories Europe, Germany)"

**16:00-17:30 Distinguished Experts Panel**

**17:30-18:00 Closing Ceremony**