



# IFIP Networking 2018

May 14-16, 2018  
Zürich, Switzerland

## Program

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# **IFIP Networking 2018 - Program at a Glance** **Zürich, Switzerland, at the Swissôtel, Zürich-Oerlikon**

Time	Monday May 14, 2018	Tuesday May 15, 2018	Wednesday May 16, 2018
8.15	Registration	Registration	Registration
9.00	Welcome: General Chair, Department's Dean, TPC Co-chairs	Keynote II	Keynote III
9.30	Keynote I	Flexibility Matters: On the Design and Evaluation of Software-defined Networks	Artificial Intelligence in Network Operations and Management Panel
10.00	Blockchain for Cyber Physical Systems	Coffee Break	Security and Privacy in the Internet of Things
10.30	Coffee Break	Session 4A	Coffee Break and Poster Session
11.00	Session 1A	SDN Architectures	
	Security and Resilience		
12.10	Lunch Break	Lunch Break	Lunch Break
12.40			
13.40	Session 2A	Session 5A	Session 7A
	Measurements and Analysis	Named Data Networking	Network Models and Algorithms
			Content Distribution
15.20	Coffee Break	Coffee Break	Coffee Break
15.50	Session 3A	Session 6A	Session 8A
	Traffic Engineering	Data Center and Overlay Networks	Short Presentation Papers I
16.50			Short Presentation Papers II
17.30	Travel to Reception and Social Event	End of day	End of day
18.00	Reception		
18.45	Social Event		
22.00	End of day		

# IFIP Networking 2018 – Keynotes

## **Keynote I: "Blockchain for Cyber Physical Systems"**

*Salil Kanhere, University of New South Wales, Sydney, Australia*

In Cyber Physical Systems (CPS), computing elements coordinate and communicate with sensors, which monitor cyber and physical indicators, and actuators, which modify the cyber and physical environment where they are run. Current CPS ecosystems rely on centralized, brokered communication models, otherwise known as the client-server paradigm. All devices are identified, authenticated, and connected through cloud servers. The data collected by devices is stored in the cloud for further processing. While this model has connected generic computing devices for decades and will continue to support small-scale CPS networks as we see them today, it will not be able to respond to the growing needs of the large-scale CPS ecosystems of tomorrow with billions of connected devices. Cloud servers will remain a bottleneck and point of failure that can disrupt the entire network. This is especially important as critical services and infrastructure such as healthcare, electric grids, logistics, and transportation become dependent on CPS. The current stove-piped architecture has also created isolated data silos, where users have limited control over their data and how it is used. Users have to trust the cloud and application providers and have no choice but to rely on their promises of security and availability.

This keynote will explore how the Blockchain (BC) technology has the potential to overcome the aforementioned challenges. BC is an immutable timestamp ledger of blocks that is used for storing and sharing data in a distributed manner. The data stored might be payment history, e.g., Bitcoin, or a smart contract or even personal data. In recent years, BC has attracted tremendous attention from practitioners and academics in different disciplines (including law, finance, and computer science) due to its salient features, which include decentralization, immutability, auditability, security, and privacy. Thus, the talk will specifically consider three key aspects of CPSes: (i) Internet of Things, (ii) Intelligent Transportation, and (iii) Supply Chain and will explain relevant concepts, will review the state-of-the-art, will present representative solutions, and will discuss open challenges.

Prof. Dr. Salil Kanhere received his M.S. and Ph.D. degrees, both in Electrical Engineering, from Drexel University, Philadelphia, U.S.A. He is an Associate Professor in the School of Computer Science and Engineering at UNSW Sydney, Australia. He is also a conjoint researcher at Data61 CSIRO, Faculty Associate at Institute of Infocomm Research Singapore, and on the advisory board of two technology start-ups.

His research interests include Internet of Things, pervasive computing, blockchain, crowdsourcing, data analytics, privacy, and security. He has published over 180 peer-reviewed articles and delivered over 20 tutorials and keynote talks on these research topics. He has received 4 Best Paper Awards. His research has been featured on ABC News Australia, Forbes, Wired, ZDNET, MIT Technology Review, IEEE Spectrum and other media outlets. Salil serves on the Steering Committee of IEEE LCN and is the program co-chair for IEEE WoWMoM 2018 and ACM MSWiM 2018. He regularly features on the organizing committee of a number of IEEE and ACM international conferences. He is on the Editorial Board of Elsevier's Pervasive and Mobile Computing and Computer Communications and on the Executive Committee of the IEEE Computer Society's Technical Committee on Computer Communications (TCCC). Salil is a Senior Member of both the IEEE and the ACM. He is a recipient of the Alexander von Humboldt Research Fellowship.





## **Keynote II: "Flexibility Matters: On the Design and Evaluation of Softwarized Networks"**

*Wolfgang Kellerer, Technical University of Munich (TUM), Germany*

In order to address network dynamics and highly varying requirements, flexibility has emerged as a key property for networks to cope with increasing dynamics and to be prepared for future demands. Softwarized networks including concepts such as Network Virtualization, Software Defined Networking and Network Function Virtualization promise flexibility. However, so far flexibility is mainly used as a qualitative advantage for a certain design choice where the meaning of flexibility is varying a lot in literature. To provide a better understanding of how to design flexible networks, we propose a definition for flexibility and present an approach for a quantitative measure of flexibility in softwarized networks. In our proposal, we refer to flexibility as the ability to support new requests, e.g., changes in the requirements or new traffic distributions, in a timely manner. We illustrate with use case studies for function placement and SDN resilience, how this measure can be used to evaluate and compare different network designs quantitatively. To address adaptation time in flexible networks, we further present approaches to speed up the execution of algorithms based on machine learning. Examples include virtual network embedding and function placement. With our proposed approach for the definition and evaluation of flexibility, we intend to stimulate the discussion towards a more quantitative analysis of softwarized networks and beyond.

Prof. Dr. Wolfgang Kellerer is a full professor with the Technical University of Munich (TUM), Germany, heading the Chair of Communication Networks at the Department of Electrical and Computer Engineering. Before, he was for over ten years with NTT DOCOMO's European Research Laboratories. His last position was head of the research department for wireless communication and mobile networking.



His current research focuses on flexible networking based on SDN/NFV and wireless M2M networking towards 5G. He received his Dr.-Ing. degree (Ph.D.) and his Dipl.-Ing. degree (Master) from TUM, in 1995 and 2002, respectively. His research resulted in over 200 publications and 35 granted patents. In 2015, he has been awarded with a Consolidator Grant from the European Commission for his project FlexNets: "Quantifying Flexibility in Communication Networks". He is a member of ACM, VDE ITG, and a Senior Member of IEEE.

## **Keynote III: "Artificial Intelligence in Network Operations and Management"**

*Jürgen Quitteck, NEC Laboratories Europe, Germany*

Complexity of communication networks and their management and operations is continuously growing. At the same time, the capabilities of Artificial Intelligence (AI) technologies, in particular of deep machine learning, are growing rapidly and offer a way to deal with the complexity.

This keynote gives a brief overview of the history of AI technologies and shows how recent advancements provide powerful means of analysis and prediction suited to address several of today's challenges in network operations and management. Several examples illustrate the variety of potential applications of AI to networking. The outlook will address upcoming technology trends, such as reinforcement learning, representation learning, and automated reasoning.

Dr. Jürgen Quittek is Managing Director of the NEC Laboratories Europe in Heidelberg, Germany. He received his degree in communications engineering from RWTH Aachen in 1989 and his Ph.D. from Hamburg University of Technology (TUHH) in 1996. After a postdoctoral year in Berkeley, California, he joined the NEC Laboratories in 1997. In 2000 he was a visiting professor at Freie Universität Berlin.



He conducted research in the areas of neural networks, network management, data security, software-defined networking, energy-efficient communications, and 5G mobile networks, and he served as TCP chair and member of many conferences and workshops. As working group chair, rapporteur, and author he contributed to communication standards at ETSI, IETF, and ONF. His current research interests also include artificial intelligence and the Internet of Things (IoT).

## **IFIP Networking 2018 – Panel**

### ***Security and Privacy in the Internet of Things***

*Panel Chair: James P.G. Sterbenz, The University of Kansas, U.S.A., and Lancaster University, U.K.*

The Internet of Things (IoT) has become not only a hot topic for research, but as usual, is being deployed before we understand the implications of this technology, and without developed usability, security, privacy, resilience, survivability, controllability, accountability, and manageability.

This panel discusses whether IoT can or will be deployed with acceptable security and privacy for users and society, and whether lessons can be learned from the current ubiquitous mobile Internet. Are we racing towards a machine-assisted utopia or a machine-controlled dystopia?

# IFIP Networking 2018 – Detailed Program

Monday, May 14, 2018

Time	Monday May 14, 2018	
8.15	Registration	
9.00	Welcome: General Chair, Department's Dean, TPC Co-chairs	
9.30	Keynote I - Blockchain for Cyber Physical Systems	
10.30	Coffee Break	
11.00	<b>Session 1A - Security and Resilience</b>	<b>Session 1B - Service Function Chaining</b>
	Rasch analysis of HTTPS reachability George Geoffrey Michaelson (Asia Pacific Network Information Centre, Australia); Matthew Roughan and Jonathan Tuke (University of Adelaide, Australia); Matt Wand (University of Technology Sydney, Australia); Randy Bush (Internet Initiative Japan, Japan)  PathFinder: Capturing DDoS Traffic Footprints on the Internet  Lumin Shi, Mingwei Zhang and Jun Li (University of Oregon, USA); Peter Reiher (UCLA, USA)  CellPAD: Detecting Performance Anomalies in Cellular Networks via Regression Analysis Jun Wu (Tsinghua University, P.R. China); Patrick Pak-Ching Lee (The Chinese University of Hong Kong, Hong Kong); Qi Li (Tsinghua University, P.R. China); Lujia Pan and Jianfeng Zhang (Huawei Research, P.R. China)  An M:N Shared Regenerator Protection Scheme in Translucent WDM Networks Elias A. Doumith (Antonian University, Lebanon); Sawzan Al Zahr (Telecom ParisTech, France)	SRv6Pipes: enabling in-network bytestream functions Fabien Duchene (Université Catholique de Louvain, Belgium); David Lebrun (UCLouvain, Belgium); Olivier Bonaventure (Université catholique de Louvain, Belgium)  SERA: Segment Routing Aware Firewall for Service Function Chaining scenarios Ahmed Abdelsalam (Gran Sasso Science Institute, Italy); Stefano Salsano (University of Rome Tor Vergata, Italy); Francois Clad (Cisco System, France); Pablo Camarillo (Cisco System, Spain); Clarence Filsfils (Cisco Systems, Inc., Belgium)  Charting the Complexity Landscape of Virtual Network Embeddings Matthias Rost (TU Berlin, Germany); Stefan Schmid (University of Vienna, Austria)  Breaking Service Function Chains with Khaleesi Sara Ayoubi, Shihabur Rahman Chowdhury and Raouf Boutaba (University of Waterloo, Canada)
12.40	Lunch Break	
13.40	<b>Session 2A - Measurements and Analysis</b>	<b>Session 2B - Congestion Control</b>
	Factors Affecting Performance of Web Flows in Cellular Networks Ermias Andargie Walegnie (Aalto University, Finland); Setälä Kim (Elisa Oyj, Finland); Vaibhav Bajpai (Technische Universität München, Germany); Stefan Neumeier (TU Munich, Germany); Jukka M J Manner (Aalto University, Finland); Jörg Ott (Technische Universität München, Germany)  Measurement and Analysis of the Reviews in Airbnb Qian Zhou and Yang Chen (Fudan University, P.R. China); Chuanhao Ma (University of Virginia, USA); Fei Li (Fudan University, P.R. China); Yu Xiao (Aalto University, Finland); Xin Wang (Fudan University, P.R. China); Xiaoming Fu (University of Goettingen, Germany)  Wrinkles in Time: Detecting Internet-wide Events via NTP Meenakshi Sivamkumar (University of Wisconsin-Madison, USA); Sathya Kumaran Mani (University of Wisconsin - Madison, USA); Ramakrishnan Durairajan (University of Wisconsin-Madison, USA); Paul Barford (University of Wisconsin - Madison, USA); Joel Sommers (Colgate University, USA)  State Acquisition in Computer Networks Ruairi de Fréin (Dublin Institute of Technology, Ireland)	Towards a Deeper Understanding of TCP BBR Congestion Control Dominik Scholz and Benedikt Jaeger (Technical University of Munich, Germany); Lukas Schwaighofer (Technische Universität München, Germany); Daniel Raumer and Fabien Geyer (Technical University of Munich, Germany); Georg Carle (Technische Universität München, Germany)  Cellular Controlled Delay TCP (C2TCP) Sohel Abbasloo, Tong Li and Yang Xu (New York University, USA); H. Jonathan Chao (NYU Tandon School of Engineering, USA)  The Virtue of Gentleness: Improving Connection Response Times with SYN Priority Active Queue Management Tristan Braud (The Hong Kong University of Science and Technology, France); Martin Heusse (Grenoble Informatics Laboratory & Grenoble INP, France); Andrzej Duda (Grenoble Institute of Technology, France)  Policy-Oriented AQM Steering Roland Bless and Mario Hock (Karlsruhe Institute of Technology (KIT), Germany); Martina Zitterbart (KIT, Germany)
15.20	Coffee Break	
15.50	<b>Session 3A - Traffic Engineering</b>	<b>Session 3B - Multipath Communication</b>
	Adaptive Robust Traffic Engineering In Software Defined Networks Davide Sanvito, Ilario Filippini and Antonio Capone (Politecnico di Milano, Italy); Stefano Paris (Huawei Technologies Co. Ltd. & Université Paris Descartes, France); Jeremie Leguay (Huawei Technologies, France Research Center, France)  An Online Power-Aware Routing in SDN with Congestion-Avoidance Traffic Reallocation Adriana Fernández-Fernández, Cristina Cervelló-Pastor and Leonardo Ochoa-Aday (Universitat Politècnica de Catalunya, Spain); Paola Grossa (University of Amsterdam, The Netherlands)  Proactive Rerouting in Network Overlays Reuven Cohen, Yuval Dagan and Gabi Nakibiy (Technion, Israel)  SWIFT: Bringing SDN Based Flow Management to Commodity Wi-Fi Access Points Seppo Hätonen, Petri Savolainen and Ashwin Rao (University of Helsinki, Finland); Hannu Flinck (Nokia Bell Labs, Finland); Sasu Tarkoma (University of Helsinki, Finland)	Multipath IP Routing on End Devices: Motivation, Design, and Performance Liyang Sun, Guibin Tian, Guanyu Zhu and Yang Liu (New York University, USA); Hang Shi and David Dai (Huawei, USA)  MultiPath TCP Storage Covert Channels Mohammad Javad Shamani (University of New South Wales, Australia); Guillaume Jourjon (Data61-CSIRO, Australia); Aruna Seneviratne (UNSW Australia, Australia)  QAware: A Cross-Layer Approach to MPTCP Scheduling Tanya Shreedhar (Indraprastha Institute of Information Technology (IIIT) Delhi, India); Nitinder Mohan (University of Helsinki, Finland); Sanjit K Kaul (IIIT Delhi, India); Jussi Kangasharju (University of Helsinki, Finland)
17.30	Travel to Reception and Social Event	
18.00	Reception	
18.45	Social Event	
22.00	End of Day	

Tuesday, May 15, 2018

Time	Tuesday May 15, 2018	
8.15	Registration	
9.00	Keynote II - Flexibility Matters: On the Design and Evaluation of Softwarized Networks	
10.00	Coffee Break	
10.30	<b>Session 4A - SDN Architectures</b>	<b>Session 4B - 5G Communications</b>
	The effect of network topology on the control traffic in distributed SDN Viktoría Fodor (KTH, Sweden); Muhammad Zeshan Naseer (KTH Royal Institute of Technology Stockholm Sweden, Pakistan)  HARMLESS: Cost-Effective Transitioning to SDN for Small Enterprises Levente Csikor, Laszlo Toka and Márk Szalay (Budapest University of Technology and Economics, Hungary); Gergely Pongrácz (Ericsson Research, Hungary)  I DPID It My Way! A Covert Timing Channel in Software-Defined Networks Robert Krösche and Kashyap Thimmaraju (TU Berlin, Germany); Liran Schiff (Tel Aviv University, Israel); Stefan Schmid (University of Vienna, Austria)  It's About Time: Analyzing Flow Table Update Latency in SDN Switch Architectures Fabricio Mazzola (Federal University of Rio Grande do Sul, Brazil); Daniel Stefani Marcon (University of Vale do Rio dos Sinos, Brazil); Miguel Neves (Federal University of Rio Grande do Sul (UFRGS), Brazil); Marinho P. Barcellos (Federal University of Rio Grande do Sul, Brazil)	Blockage-Robust 5G mm-Wave Access Network Planning Mohammad Nourifar, Francesco Devoti and Ilario Filippini (Politecnico di Milano, Italy)  Rethinking Service Chain Embedding for Cellular Network Slicing Chrysa Papagianni (Institute for Systems Research & University of Maryland, USA); Panagiotis Papadimitriou (University of Macedonia, Greece); John Baras (University of Maryland, College Park, USA)  D2D Multihop Energy-Efficient Routing and OFDMA Resource Allocation in 5G Networks Safwan Alwan (University Paris Est Créteil (UPEC), France); Ilhem Fajjari (Orange labs, France); Nadjib Aitsadi (ESIEE Paris & Laboratory of Computer Science Gaspard-Monge - LIGM / CNRS (UMR 8049), France)  Dynamic load balancing in 5G HetNets for optimal performance-energy tradeoff Misikir Gebrehiwot, Pasi Lassila and Samuli Aalto (Aalto University, Finland)
12.10	Lunch Break	



13.40	<b>Session 5A - Named Data Networking</b>  Making Name-Based Content Routing More Efficient than Link-State Routing <i>JJ Garcia-Luna-Aceves (University of California at Santa Cruz &amp; Palo Alto Research Center, USA); Ehsan Hemmati (UCSC, USA)</i>  PopNetCod: A Popularity-based Caching Policy for Network Coding enabled Named Data Networking <i>Jonnahtan Saltarin and Torsten Ingo Braun (University of Bern, Switzerland); Eirina Bourtsoulatz (Imperial College London, United Kingdom); Nikolaos Thomas (University of Essex, United Kingdom)</i>  NEST: Efficient Transport of Data Summaries over Named Data Networks <i>Karim A. Khalil (Amazon Lab126, USA); Azeem Aqil and Srikanth V. Krishnamurthy (University of California, Riverside, USA); Tarek Abdelzaher (University of Illinois, Urbana Champaign, USA); Lance Kaplan (US Army Research Laboratory, USA)</i>  MUCA: New Routing for Named Data Networking <i>Chavoush Ghasemi (University of Arizona, USA); Hamed Yousefi and Kung Shin (University of Michigan, USA); Beichuan Zhang (University of Arizona, USA)</i>	<b>Session 5B - Wireless and Mobile Networks</b>  Association Optimization in Wi-Fi Networks based on the Channel Busy Time Estimation <i>Mohammed Amer (Université de Lyon/LIP-ENS de Lyon, France); Anthony Busson (Ecole Normale Supérieure &amp; Laboratoire de l'Informatique du Parallélisme, France); Isabelle Guérin Lassous (Université Claude Bernard Lyon 1 - LIP, France)</i>  Carrier-Sense Multiple Access with Transmission Acquisition (CSMA/TA) <i>Marcelo M Carvalho (University of Brasília, Brazil); JJ Garcia-Luna-Aceves (University of California at Santa Cruz &amp; Palo Alto Research Center, USA)</i>  Prescriptive Analytics for MEC Orchestration <i>Alberto Ceselli (Università degli Studi di Milano, Italy); Marco Fiore (National Research Council of Italy, Italy); Angelo Furno (IFSTTAR, ENTPE, Université de Lyon, France); Marco Premoli (Università degli Studi di Milano, Italy); Stefano Secci (Sorbonne Université, France); Razvan Stanica (INSA Lyon, France)</i>  Profit and Strategic Analysis for MNO-MVNO Partnership <i>Nesrine Ben Khalifa, Amal Benhamiche, Alain Simonian and Marc Bouillon (Orange Labs, France)</i>
15.20	Coffee Break	
15.50	<b>Session 6A - Data Center and Overlay Networks</b>  HyLine: a Simple and Practical Flow Scheduling for Commodity Datacenters <i>Soheil Abbasloo and Yang Xu (New York University, USA); H. Jonathan Chao (NYU Tandon School of Engineering, USA)</i>  Dynamic Load Balancing with Tokens <i>Céline Comte (Nokia Bell Labs France &amp; Télécom ParisTech, France)</i>  Moving Bits with a Fleet of Shared Virtual Routers <i>Pradeeban Kathiravelu (INESC-ID Lisboa / Instituto Superior Técnico, Universidade de Lisboa, Portugal); Marco Chiesa (KTH Royal Institute of Technology, Sweden); Pedro de B Marcos (UFRGS/FURG, Brazil); Marco Canini (KAUST, Saudi Arabia); Luís Veiga (INESC-ID Lisboa / Instituto Superior Técnico, Universidade de Lisboa, Portugal)</i>  Real-time Money Routing by Trusting Strangers with your Funds <i>Martijn De Vos and Johan Pauwelse (Delft University of Technology, The Netherlands)</i>	<b>Session 6B - Virtualization and Resource Sharing</b>  Virtual Network Embedding Approximations: Leveraging Randomized Rounding <i>Matthias Rost (TU Berlin, Germany); Stefan Schmid (University of Vienna, Austria)</i>  Ahab: Data-Driven Virtual Cluster Hunting <i>Johannes Zerwas (Technische Universität München, Germany); Patrick Kalmbach (Technical University of Munich, Germany); Carlo Fuerst and Arne Ludwig (TU Berlin, Germany); Andreas Blenk and Wolfgang Kellerer (Technische Universität München, Germany); Stefan Schmid (University of Vienna, Austria)</i>  Controlling software router resource sharing by fair packet dropping <i>Vamsi Addanki and Leonardo Linguaglossa (Telecom ParisTech, France); James Roberts (IRT SystemX, France); Dario Rossi (Telecom ParisTech, France)</i>  Stateful Dominant Resource Fairness: Considering the Past in a Multi-Resource Allocation <i>Hugo Sadok (Universidade Federal do Rio de Janeiro, Brazil); Miguel Elias Mitre Campista (Federal University of Rio de Janeiro &amp; GTA, Brazil); Luis Henrique M. K. Costa (Federal University of Rio de Janeiro, Brazil)</i>
17.30	End of Day	

## Wednesday, May 16, 2018

Time	Wednesday May 16, 2018	
8.15	Registration	
9.00	Keynote III - Artificial Intelligence in Network Operations and Management	
10.00	Panel - Security and Privacy in the Internet of Things	
11.00	Coffee Break and Poster Session	
12.10	Lunch Break	
13.40	<b>Session 7A - Network Models and Algorithms</b>  A New Dependence Model for Heterogeneous Markov Modulated Poisson Processes <i>Fang Dong, Kui Wu and Venkatesh Srinivasan (University of Victoria, Canada)</i>  Improving Output Bounds in the Stochastic Network Calculus Using Lyapunov's Inequality <i>Paul Nikolaus (Distributed Computer Systems Lab   TU Kaiserslautern, Germany); Jens Schmitt (University of Kaiserslautern, Germany)</i>  Hierarchical Layer Selection with Low Overhead in Prioritized Network Coding <i>Marie Schaeffer, Roman Naumann and Stefan Dietzel (Humboldt-Universität zu Berlin, Germany); Björn Scheuermann (Humboldt University of Berlin, Germany)</i>  A Blockchain Consensus Protocol With Horizontal Scalability <i>Kelong Cong (EPFL, Switzerland); Zhijie Ren and Johan Pauwelse (Delft University of Technology, The Netherlands)</i>	<b>Session 7B - Content Distribution</b>  On the Delay Performance of Browser-based Interactive TCP Free-viewpoint Streaming <i>Tilak Varisetty (Leibniz Universität Hannover &amp; TynTec GmbH, Germany); Markus Fidler (Leibniz Universität Hannover, Germany); Matthias Ueberheide (Computer Graphics Lab, Germany); Marcus Magnor (Technische Universität Braunschweig, Germany)</i>  Alternative Handshake Mechanism for the Stream Control Transmission Protocol <i>Felix Weinrank, Irene Rüngeler and Michael Tüxen (Münster University of Applied Sciences, Germany); Erwin P. Rathgeb (Universität Duisburg-Essen, Germany)</i>  A Framework for Evaluating Caching Policies in A Hierarchical Network of Caches <i>Eman Ramadan, Pariya Babaie and Zhi-Li Zhang (University of Minnesota, USA)</i>  Neural Networks for Measurement-based Bandwidth Estimation <i>Sukhpreet Kaur Khangura, Markus Fidler and Bodo Rosenhahn (Leibniz Universität Hannover, Germany)</i>
15.20	Coffee Break	
15.50	<b>Session 8A - Short Presentation Papers I</b>  Decentralized Scheduling for Offloading of Periodic Tasks in Mobile Edge Computing <i>Sladana Jošilo and György Dán (KTH Royal Institute of Technology, Sweden)</i>  Experience-Availability Analysis of Online Cloud Services using Stochastic Models <i>Yue Cao, Laiping Zhao, Rongqi Zhang, Yanan Yang, Xiaobo Zhou and Keqiu Li (Tianjin University, P.R. China)</i>  Tuning Multipath TCP for Interactive Applications on Smartphones <i>Quentin De Coninck (Université Catholique de Louvain, Belgium); Olivier Bonaventure (Université catholique de Louvain, Belgium)</i>  Waypoint Routing in Special Networks <i>Saeed Akhoondian Amiri (MPI, Saarland, Germany); Klaus-Tycho Foerster (University of Vienna, Austria); Riko Jacob (IT University of Copenhagen, Denmark); Mahmoud Parham and Stefan Schmid (University of Vienna, Austria)</i>	<b>Session 8B - Short Presentation Papers II</b>  Complex Services Offloading in Opportunistic Networks <i>The An Binh Nguyen (Technische Universität Darmstadt, Germany); Marius Rettberg-Päprow and Christian Meurisch (TU Darmstadt, Germany); Tobias Meuser</i>  PPAD: Privacy Preserving Group-Based ADvertising in Online Social Networks <i>Sanaz Taheri Boshrooyeh and Alptekin Küpçü (Koç University, Turkey); Ozgur Ozkasap (Koc University, Turkey)</i>  Is There a Case for Parallel Connections with Modern Web Protocols? <i>Jawad Manzoor and Ramin Sadre (Université Catholique de Louvain, Belgium); Idilio Drago (Politecnico di Torino, Italy); Llorenç Cerdà-Alabern (Universitat Politècnica de Catalunya, Spain)</i>  A Protocol-Ignorance Perspective on Incremental Deployability of Routing Protocols <i>Vadim Kirilin (IMDEA Networks Institute &amp; University Carlos III of Madrid, Spain); Sergey Gorinsky (IMDEA Networks Institute, Spain)</i>
16.50	End of Day	