

# *The 7<sup>th</sup> IFIP International Conference on New Technologies, Mobility and Security (NTMS 2015)*

➔ PROGRAM



*Organizers:*



[www.ntms-conf.org](http://www.ntms-conf.org)

NTMS 2015  
27 to 29 JULY 2015 / PARIS - FRANCE

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Time	Session
<b>Monday, July 27</b>	
08:30 AM-09:00 AM	<i>Welcome Message</i>
09:00 AM-10:00 AM	<i>Keynote Speaker #1</i>
10:00 AM-10:30 AM	<i>Coffee Break</i>
10:30 AM-12:30 PM	<i>Wireless Access, Channel Coding &amp; Cognitive Radio, Services over Mobile Networks</i>
12:30 PM-01:30 PM	<i>Lunch</i>
01:30 PM-03:15 PM	<i>Ad hoc and Sensor Networks, Security models and frameworks, Wireless Sensor Networks and Security</i>
03:15 PM-03:30 PM	<i>Coffee Break</i>
03:30 PM-06:00 PM	<i>Tutorial #1</i>
<b>Tuesday, July 28</b>	
09:00 AM-10:00 AM	<i>Keynote Speaker #2</i>
10:30 AM-12:30 PM	<i>Heterogeneous Networks, Performance Evaluation of Wireless Networks, Security and privacy for constrained devices / Machine learning and security</i>
12:30 PM-01:30 PM	<i>Lunch</i>
01:30 PM-03:00 PM	<i>New Radio Access, Vehicular Networks and Applications, Security, trust and risk management in distributed and heterogeneous systems</i>
03:00 PM-03:30 PM	<i>Coffee Break</i>
03:30 PM-05:30 PM	<i>Tutorial #2</i>
<b>Wednesday, July 29</b>	
09:00 AM-10:30 AM	<i>Innovative Projects Session, SOFNET Session 1, WSN-ADT Session 1</i>
10:00 AM-10:30 AM	<i>WSN-ADT Session 1</i>
10:30 AM-11:00 AM	<i>Coffee Break</i>
11:00 AM-12:30 PM	<i>Intelligent Transportation Systems, SOFNET Session 2, WSN-ADT Session 2</i>
12:30 PM-01:30 PM	<i>Lunch</i>
01:30 PM-03:00 PM	<i>Smart City Workshop, RCBR2015</i>
03:00 PM-03:30 PM	<i>Coffee Break</i>
03:30 PM-04:30 PM	<i>Keynote Speaker #3</i>
04:30 PM-05:00 PM	<i>Best Paper Award and Closing Remark</i>

**Monday, July 27**

**8:30 AM - 9:00 AM**

**Welcome Message**

Room: Amphi B310

**9:00 AM - 10:00 AM**

**Keynote Speaker #1**

Room: Amphi B310

***5G Mobile Communications for 2020 and Beyond***

Speaker: Prof. Khaled B. Letaief, FIEEE and FHKIE



**10:00 AM - 10:30 AM**

**Coffee Break – E200**

**10:30 AM - 12:30 PM**

**Wireless Access, Channel Coding & Cognitive Radio**

Chair: Eduardo B. Fernandez (Florida Atlantic University, USA)

Room: Amphi B310

***Enhanced LTE Physical Downlink Control Channel Design for Machine-Type Communications***

Jinsong Hu (Nanjing University of Science and Technology, P.R. China)

***The Design of A Rateless Channel Coding Scheme for Deep-Space Communication***

Shaolei Chen (Information & Telecommunication Company, Sichuan Electric Power Corporation, P.R. China); Chuangmu Yao (Taobao (China) Software Co. Ltd, P.R. China); (Information & Telecommunication Company, Sichuan Electric Power Corporation,, P.R. China)

***Towards Software Defined Cognitive Networking***

Ijaz Ahmad, Suneth Namal and Mika Ylianttila (University of Oulu, Finland); Andrei Gurtov (Aalto University & ITMO University, Finland)

***Distributed interference management using Q-Learning in Cognitive Femtocell networks: New USRP-based Implementation***

Medhat Hamdy (Qatar University, Qatar); Amr Mohamed (Qatar University & Qatar University Wireless Innovations Center, Qatar)

***An Cognitive Two-way Relay Transmission Scheme Based on Adaptive QAM and Wireless Network Coding***

Ke Ke, Yixi Xie, Yongjie Liu and Chao Hua (National Digital Switching System Engineering and Technological R&D Center, P.R. China)

***Classification and Comparative Analysis of Inter-Cell Interference Coordination Techniques in LTE Networks***

Mohamed Abdelkarim AboulHassan (Pharos University & RedTelecom Co., Egypt); Mohamad Yassin (University of Rennes 1 & Saint-Joseph University, France); Samer Lahoud (IRISA, University of Rennes 1, France); Marc Ibrahim (Saint Joseph University & Saint Joseph University - ESIB, Lebanon); Dany Mezher (Saint Joseph University, Lebanon); Bernard Cousin (University of Rennes 1 & IRISA Research Laboratory, France); Essam Sourour (Alexandria University, Egypt)

**Services over Mobile Networks**

Chair: Abdelhamid Mammeri (University of Ottawa, Canada)

Room: Jade - R2

***Proposal of Multi-value Cell structure and High-density Two-dimensional Codes and Evaluation of Readability using Smartphones***

Nobuyuki Teraura (Terrara Code Research Institute, Japan); Kouichi Sakurai (Kyushu University, Japan)

***MASCA: Management of Simultaneous Connectivity for Applications***

Victor Tortorello, Neto (Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, Brazil); Daniel Lobato (Instituto Federal de Educacao, Ciencia e Tecnologia de Sao Paulo, Brazil); Rodolfo Meneguette (Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, Brazil)

***Efficient Web Services Selection based on QoS through a Distributed Parallel Semantic Approach***

Luis Hideo V. Nakamura, Julio Cezar Estrella, Marcos José Santana (University of São Paulo); Stephan Reiff-Marganiec (University of Leicester, United Kingdom)

***Integrating OpenFlow to LTE: some issues toward Software-Defined Mobile Networks***

Luciano Jerez Chaves, Vítor Marge Eichemberger, Islene Calciolari Garcia, Edmundo Roberto Mauro Madeira (University of Campinas)

***NGNaas: NGNs as Cloud Computing Services***

Fatna Belqasmi, May El Barachi (Zayed University); Jose Alcaraz-Calero (University of the West of Scotland); Omar Al Fandi, Mohamad Badra (Zayed University)

**12:30 PM - 1:30 PM**

**Lunch**

**1:30 PM - 3:15 PM**

**Ad hoc and Sensor Networks**

Chair: Layth Sliman (EFREI- Paris, France)

Room: Amphi B310

***Ad hoc Vehicular: Exploratory Evaluation of a Vehicular Ad hoc Network in Urban and Highway Settings***

Claudio Correa, Jo Ueyama (University of Sao Paulo, Brazil); Rodolfo Meneguette (Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, Brazil); Leandro Aparecido Villas (UNICAMP, Brazil)

### ***Lifetime Optimization of Sensor-Cloud Systems***

Leila Ben Saad (ENIT, Tunisia); Bernard Tourancheau (LIG UMR 5217 & Grenoble Univ., France)

### ***QoE-Aware Multiple Sinks Mobility in Wireless Sensor Networks***

João Paulo J Peixoto and Daniel G. Costa (State University of Feira de Santana, Brazil)

### ***Imposter Detection for Replication Attacks in Mobile Sensor Networks***

Tassos Dimitriou (Computer Technology Institute in Greece and Kuwait University, Greece); Ebrahim Alrashed, Mehmet Hakan Karaata and Ali Hamdan (Kuwait University, Kuwait)

## **Security models and frameworks**

Chair: Jalel Ben-Othman (University of Paris 13, France)

Room: Jade - R2

### ***Concept for a Security Investigation Framework***

Martin Ussath (Hasso Plattner Institute, Germany); Feng Cheng (University of Potsdam, Germany); Christoph Meinel (Hasso Plattner Institute, University of Potsdam, Germany)

### ***Modeling Information Flow Properties with UML***

Kuzman Katkalov, Kurt Stenzel, Marian Borek and Wolfgang Reif (University of Augsburg, Germany)

### ***Analysis of XACML Policies with ASP***

Dhouha Ayed (Thales, France)

### ***Considering technical and financial impact in the selection of security countermeasures against Advanced Persistent Threats***

Gustavo Gonzalez Granadillo (CNRS Samovar UMR5157, Institut Telecom, Telecom SudParis, France); Joaquin Garcia-Alfaro (Telecom SudParis, France); Herve Debar (Télécom SudParis & Institut Télécom, France); Christophe Ponchel and Laura Rodriguez-Martin (Airbus Defence & Space CyberSecurity, France)

## **Wireless Sensor Networks and Security**

Chair: Michael Strasser (TU Berlin & Bosch Software Innovations, Germany)

Room: Grenat - R3

### ***A Coverage Algorithm for Intermittently Connected Delay Tolerant Wireless Sensor Networks***

Israel Vasconcelos; David Lima; Andre Aquino (Universidade Federal de Alagoas, Brazil); Carlos Maurício Figueiredo (State University of Amazonas, Brazil)

### ***Indoor Patient Monitoring Through Wifi and Mobile Computing***

João M. G. Duarte (University of Campinas & University of Cape Verde, Brazil); Eduardo Cerqueira (Federal University of Para & UCLA & UFPA & UCLA, Brazil); Leandro Aparecido Villas (UNICAMP, Brazil)

### ***Combining Cell Phones and WSNs for Preventing Accidents in Smart-homes with Disabled People***

Diulie Freitas and Tiago Marcondes (Federal Intitutuion of São Paulo - IFSP, Brazil); Luis Hideo V. Nakamura (University of São Paulo & USP, Brazil); Jo Ueyama (University of São Paulo (USP) & Institute of Mathematics and Computer Science, Brazil); Pedro Henrique Gomes (University of Southern California, USA); Rodolfo

Meneguette (Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, Brazil)

***Conceptual Architecture for Self-Discovering in Fragmented Service Systems***

Michael Strasser (TU Berlin & Bosch Software Innovations, Germany)

***Implementation of the fully homomorphic encryption scheme over integers with shorter keys***

Luan Santos (Universidade Estadual de Campinas, Brazil); Guilherme Bilar (Universidade Federal de São Carlos, Brazil); Fabio Pereira (University Center Eurípides, Brazil)

**3:15 PM - 3:30 PM**

**Coffee Break – E200**

**3:30 PM - 6:00 PM**

**Tutorial #1**

Room: Amphi B310

***Building Secure Distributed Architectures Using Security Patterns***

Prof. Eduardo B. Fernandez, Ph.D.



Abstract: Patterns combine experience and good practices to develop basic models that can be used to build new systems and to evaluate existing systems. Security patterns join the extensive knowledge accumulated about security with the structure provided by patterns to provide guidelines for secure system design and evaluation. We consider the structure and purpose of security patterns, show a variety of security patterns, and illustrate their use in the construction of secure systems. These patterns include among others Authentication, Authorization/Access Control, Firewalls, Secure Broker, Web Services Security, and Cloud Security. We have built a catalog of over 100 security patterns. We introduce Abstract Security patterns (ASPs) which are used in the requirements and analysis stages. We complement these patterns with misuse patterns, which describe how an attack is performed from the point of view of the attacker and how it can be stopped. We integrate patterns in the form of security reference architectures. Reference architectures have not been used much in security and we explore their possibilities. We introduce patterns in a conceptual way, relating them to their purposes and to the functional parts of the architecture. We show how to apply these patterns through a secure system development methodology. Example architectures include a financial system and a cloud computing system. The use of patterns can provide a holistic view of security, which is a fundamental principle to build secure systems. Patterns can be applied throughout the software lifecycle and provide a good communication tool for the builders of the system. The patterns and reference architectures are shown using UML models and examples are taken from my two books on security patterns as well as from my recent publications. The patterns are put in context; that is, we do not present a disjoint collection of patterns but we present a logical architectural structuring where the patterns are added where needed. In fact, we present a complete methodology to apply the patterns along the system lifecycle emphasizing the network and distribution aspects of the system.



**Tuesday, July 28**

**9:00 AM - 10:00 AM**

**Keynote Speaker #2**

Room: Amphi B310

***On the design of a new generation of services and applications for pervasive and mobile computing***

Professor Antonio Loureiro, the Federal University of Minas Gerais (UFMG), Brazil.



**10:30 AM - 12:30 PM**

**Heterogeneous Networks**

Chair: Antonio A.F. Loureiro (Federal University of Minas Gerais, Brazil)

Room : Amphi B310

***Pricing Strategies in Multi-Operator Heterogeneous Wireless Networks***

Soha Farhat (Lebanese University & CRSI, Lebanon); Abed Ellatif Samhat (Lebanese University, Lebanon); Samer Lahoud (IRISA, University of Rennes 1, France); Bernard Cousin (University of Rennes 1 & IRISA Research Laboratory, France)

***D2D Broadcast Communications for 4G PMR networks***

Xavier Pons Masbernat (Airbus Defense & Space, France); Christophe Gruet (Cassidian, France); Eric Georgeaux (CASSIDIAN (an EADS Company), France); Lirida Naviner (Ecole Nationale Supérieure des Télécommunications, France)

***Survey and comparison of MADM methods for network selection access in heterogeneous networks***

Lahby Mohamed (Ecole Normale Supérieure (ENS) de Casablanca, Morocco); Abderrahim Sekkaki (University, Morocco); Silki Baghla (PTU, India)

***Borrowing Address from Two-hop Neighbor to Improve Successful Probability of Joining IEEE 802.15.5 -Based Mesh Wireless Sensor Networks***

Cong Sun, Yi-hua Zhu, Liyong Yuan and Kaikai Chi (Zhejiang University of Technology, P.R. China)

***Towards Power Profiling of Android Permissions***

Kevan Adlard, Tharanga Ekanayake and Ashraf Matrawy (Carleton University, Canada)

**Performance Evaluation of Wireless Networks**



Chair: Abdelhamid Mammeri (University of Ottawa, Canada)

Room: Jade - R2

***On-the-Fly Algorithm for the Service Composition Problem***

Hikmat Farhat (Notre Dame University, Lebanon); Guillaume Feuillade (IRIT, France)

***Sahyog: A Middleware for Mobile Collaborative Applications***

Garvita Bajaj (Indraprastha Institute of Information Technology, New Delhi, India);  
Pushpendra Singh (IIIT Delhi, India)

***Adaptive Framework for Data Transmission over GSM Voice Channel for Developing Regions***

Siddhartha Asthana (Indraprastha Institute of Information Technology, India);  
Pushpendra Singh (IIIT Delhi, India); Shraddha Jain (Indraprastha Institute of Information Technology, India)

***Design, Implementation and Evaluation of SDN-based Resource Management Model***

Mahmud Rasih Celenlioglu (Gebze Technical University, Turkey); Haci Ali Mantar (Gebze Institute of Technology, Turkey); Mohammed Al Sadi (Gebze Technical University, Turkey)

***Satisfying QoS Requirements in NGN Networks using an Optimized Resource Control and Management Method***

Cherif Ghazel (ENSI, University of Manouba, Tunisia)

**Security and privacy for constrained devices / Machine learning and security**

Chair: Pascal Urien (Télécom ParisTech, France)

Room: Grenat - R3

***Mining Social Networks for Software Vulnerabilities Monitoring***

Slim Trabelsi (SAP & SAP Labs France, France)

***A Cloud-based Architecture for Network Attack Signature Learning***

Maïssa Mbaye (Université Gaston Berger de Saint-Louis & LANI, Senegal); Francine Krief (University of Bordeaux, France); Omessaad Hamdi (South University of Toulon, France)

***Online Detection of Anomalous Network Flows with Soft Clustering***

Mikhail Zolotukhin and Timo Hämäläinen (University of Jyväskylä, Finland); Tero Kokkonen (JAMK University of Applied Sciences & Institute of Information Technology, Finland); Jarmo Siltanen (University of Applied Sciences, Finland)

***A Classification of Web Browser Fingerprinting Techniques***

Randika Upathilake, Yingkun Li and Ashraf Matrawy (Carleton University, Canada)

***Trust-based Storage in a Kademia Network Infected by Sybils***

Riccardo Pecori (eCAMPUS University, Italy)

**12:30 PM - 1:30 PM**

**Lunch**

**1:30 PM - 3:00 PM**

## New Radio Access

Chair: Riccardo Pecori (eCAMPUS University, Italy)

Room: Amphi B310

### ***Interference Avoidance for TVWS Smart Metering System by Optimization Assignment Problem***

Chuyen Khoa Huynh (Soongsil University, Korea); Mai Nguyen (Soongsil Univ, Korea);  
Won Cheol Lee (Soongsil University, Korea)

### ***WiFi/WhiteFi Handover: Signaling and Performance***

Budoor Bawazeer, Nadine Akkari Adra and Ghadah Aldabbagh (King Abdulaziz University, Saudi Arabia); Nikos Dimitriou (NCSR Demokritos, Greece)

### ***Performance of Joint Transmission CoMP With Global Precoding Matrix and IRC Receiver for LTE-A***

Heba Ahamed (Pharos university -alexandria, Egypt); Essam Sourour (Alexandria University, Egypt); Hassan Elkamchouchi (Faculty of Engineering, Egypt)

## Vehicular Networks and Applications

Chairs: Cherif Ghazel (ENSI, University of Manouba, Tunisia)

Room: Jade - R2

### ***A method of Securing Priority-use Routes for Emergency Vehicles Using Inter-vehicle and Vehicle-road Communication***

Yuma Moroi and Kazumasa Takami (Soka University, Japan)

### ***Minimizing Traffic Jams in Urban Centers Using Vehicular Ad Hoc Networks***

Allan Mariano de Souza (UNICAMP, Brazil); Guilherme Maia (Federal University of Minas Gerais, Brazil); Roberto S. Yokoyama (UNICAMP), Brazil); Antonio A.F. Loureiro (Federal University of Minas Gerais, Brazil); Leandro Aparecido Villas (UNICAMP, Brazil)

### ***Impact of Desynchronization Problem in 1609.4/WAVE Multi-Channel Operation***

Erick Donato (University of Campinas, Brazil); Edmundo Madeira (State University of Campinas, Brazil); Leandro Aparecido Villas (UNICAMP, Brazil)

### ***Data Dissemination in Vehicular Networks: Challenges, Solutions, and Future Perspectives***

Leandro Villas – university of Campinas

### ***Enhancing Immediacy of Identification with Multi-Stage Application Identification***

Yuichi Kumano and Shingo Ata (Osaka City University, Japan); Nobuyuki Nakamura (OKI Electric Industry Co., Ltd., Japan); Yoshihiro Nakahira (Oki Electric Industry, Japan); Ikuo Oka (Osaka City University, Japan)

## Security, trust and risk management in distributed and heterogeneous systems

Chairs: Slim Trabelsi (SAP, France)

Room: Grenat - R3

### ***A Novel Cryptography based Privacy Preserving Solution for Urban Mobility and Traffic Control***

Mohamad Badra (Zayed University, UAE); Elyes Ben Hamida (Qatar Mobility Innovations Center (QMIC), Qatar)

### ***RACE: Risk Analysis for Cooperative Engines***

Aymen Boudguiga (IRT SystemX, France); Antoine Boulanger and Pascal Chiron (PSA, France); Houda Labiod (Infres, France); Jean-Christophe Seguy (Continental Automotive, France); Witold Klauedel (Renault, France)

***Serverless Lightweight Mutual Authentication Protocol for small mobile Computing Devices***

Collins Mtita (Telecom SudParis & Traxens S.A.S, France); Maryline Laurent (Institut Mines-Télécom, Télécom SudParis, France); Pascal Daragon (TRAXENS, France)

**3:00 PM - 3:30 PM**

**Coffee Break – E200**

**3:30 PM - 5:30 PM**

**Tutorial #2**

Room: Amphi B310

***Designing the Next Generation of Intelligent Transportation Systems***

Abdelhamid Mammeri and Azzedine Boukerche



Abstract: Road traffic accidents cause huge losses to the national economy, peoples' lives and property every year. According to the American Center for Disease Control and Prevention, the cost caused by automobile crash injuries was over 99 billion dollars. Highway accidents are caused mainly by many factors such as the rapid increase in highway mileage, rising traffic rate and the undesirable behaviour of drivers. Therefore, studies on collision prevention systems have become a hot topic in both research academia and automotive industries in many countries, in order to reduce traffic accidents. With the fast advances of technology, there is a concerted determination to improve current Advanced Driver Assistant Systems (ADAS) in order to increase driver aptitudes and to protect road-users, while reducing the Transportation's environmental impacts. ADAS refers to a set of hardware and software components, such as collision prevention systems and object localization and avoidance systems, used to assist drivers and increase their aptitudes. In this talk, the design and challenges of such systems are properly addressed. Particular attention are given to vision-based ITS because they are the most reliable low-cost systems.

## Wednesday, July 29

9:00 AM - 10:30 AM

### Innovative Projects Session

Chair: Elyes Ben Hamida (Qatar Mobility Innovations Center (QMIC), Qatar)

Room: Amphi B310

#### ***Security of C-ITS Messages: a Practical Solution The ISE Project Demonstrator***

Pierpaolo Cincilla (Institut de recherche technologique SystemX, France); Arnaud Kaiser (Institut de Recherche Technologique SystemX, France); Brigitte Lonc (Renault, France); Houda Labiod (TELECOM ParisTech (ex: ENST), France); Rémi Blancher (OpenTrust, France); Christophe Jouvray (Trialog, France); Richard Denis (Valeo, France); Antoine Boulanger (PSA, France)

#### ***System Modeling and Risk Analysis using AADL for Critical Infrastructure Security***

Serhat Gezgin, Emel Uras, Emre Eroglu, Levent Altay, Serif Bahtiyar and Gurkan Gur (Provus - A MasterCard Company, Turkey)

#### ***An Hybrid Platform for Remote Health Monitoring: from concept to deployment***

Karel Heurtefeux, Nasreen Mohsin and Hamid Menouar (Qatar Mobility Innovations Center, Qatar)

#### ***A remote deep sleep monitoring system based on a single channel for in-home insomnia diagnosis***

Sana Tmar-Ben Hamida and Beena Ahmed (Texas A&M University at Qatar, Qatar)

### SOFNET Session 1

Chairs: Mario Köppen and Masato Tsuru (Kyushu Institute of Technology, Japan)

Room: Jade - R2

#### ***Keynote: Automatic measuring of perceptual quality, a major QoE component of video- and audio-based services***

Professor Gerardo Rubino (INRIA, France)

#### ***A Database Driven Data Channel Selection Scheme for V2V Communication over TV White Space***

Hitoshi Nakao, Kazuya Tsukamoto, Masato Tsuru and Yuji Oie (Kyushu Institute of Technology, Japan)

#### ***Zonal Fairness in Wireless Infrastructure***

Mario Köppen and Masato Tsuru (Kyushu Institute of Technology, Japan)

### WSN-ADT Session 1

Chairs: Shahid Raza (Swedish Institute of Computer Science (SICS) Swedish ICT, Sweden), Omar Alfandi (University of Goettingen, Germany)

Room: Grenat - R3

#### ***UV Glass Sensor***

Saravanan Yuvaraja and Stree Vithya (Easwari Engineering College, India)

#### ***A Three Dimensions Position Based Adaptive Real-Time Routing Protocol for Wireless Sensor Networks***

Fariborz Entezami (Kingston University & WMN Research Group, United Kingdom); Christos Politis (Kingston University, United Kingdom)

### ***Distortion Analysis of Underwater Acoustic Sensor Networks***

Andrej Stefanov (IBU Skopje, Macedonia, the former Yugoslav Republic of)

**10:30 AM - 11:00 AM**

### **Coffee Break – E200**

**11:00 AM - 12:30 PM**

### **Intelligent Transportation Systems**

Chair: Philippe Langlois (University of Perpignan Via Domitia, France)

Room: Amphi B310

#### ***Distance Measurement System for Smart Vehicles***

Mingchang Zhao, Abdelhamid Mammeri, Azzedine Boukerche (University of Ottawa, Canada)

#### ***Design of Lane Keeping Assist System for Autonomous Vehicles***

Mammeri Abdelhamid, Lu Guangqian, Boukerche Azzedine (University of Ottawa, Canada)

### **SOFNET Session 2**

Chairs: Mario Köppen and Masato Tsuru (Kyushu Institute of Technology, Japan)

Room: Jade - R2

#### ***Reliable and Flexible Communications for Power Systems: Fault-tolerant Multicast with SDN/OpenFlow***

Thomas Pfeiffenberger and Jia Lei Du (Salzburg Research Forschungsgesellschaft m. b. H., Austria); Pedro Arruda, Alessandro Anzaloni (Instituto Tecnológico de Aeronautica (ITA), Brazil)

#### ***A Comparison Analysis of Trust-adaptive Approaches to Deliver Signed Public Keys in P2P Systems***

Riccardo Pecori (eCAMPUS University, Italy)

#### ***Elastic Flow Rerouting: a complexity study***

Yoann Fouquet (Université de Technologie de Compiègne, France); Dritan Nace (Compiègne University of Technology, France)

#### ***Detecting Critical Protected Links to Keep Connectivity to Servers Against Link Failures***

Daishi Irie, Shinya Kurimoto and Hiroyoshi Miwa (Kwansei Gakuin University, Japan)

### **WSN-ADT Session 2**

Chair: Manfred Sņeps-Sņeppe (Ventspils UniversityCollege, Latvia)

Room: Grenat - R3

#### ***Wireless Sensor Device Hardware Architecture -Design and Analysis for High Availability***

David Selvakumar (C-DAC BANGALORE, India); Kaushik Nanda (CDAC, Bangalore, India); Haribabu Pasupuleti (Centre for Development of Advanced Computing, India)

#### ***BSD-based Elliptic Curve Cryptography for the Open Internet of Things***

Oriol Piñol Piñol (Yanzi Networks AB, Stockholm, Sweden); Shahid Raza (Swedish Institute of Computer Science (SICS) Swedish ICT, Sweden); Joakim Eriksson (Swedish Institute of Computer Science, Sweden); Thiemo Voigt (Swedish Institute of Computer Science & Uppsala University, Sweden)

### ***A New Energy Saving Framework for Long Lasting Wireless Sensor Nodes***

Dragos Ioan Sacaleanu, Lucian Andrei Perisoara, Rodica Stoian, Vasile Lazarescu  
(Politehnica Institute, Bucharest, Romania)

### ***Metadata in SDN API for WSN***

Manfred Sneps-Sneppe (Ventspils University College & VIRAC, Latvia); Dmitry Namiot  
(Moscow State University, Russia)

**12:30 PM - 1:30 PM**

**Lunch**

**1:30 PM - 3:00 PM**

### **Smart City Workshop**

Chairs: Fariborz Entezami (Kingston University, United Kingdom), Dragos Ioan Sacaleanu  
(Politehnica University of Bucharest, Romania)

Room: Amphi B310

### ***Using thermal transients at the outlet of electrical water heaters to recognize consumption patterns for heating schedule optimization***

Philip J C Nel, Marthinus J Booyen (Stellenbosch University & MTN Mobile  
Intelligence Lab, South Africa); Brink van Der Merwe (Stellenbosch University, South  
Africa)

### ***Threat Detection and Prevention Using Adaptive Security for the Smart Internet of Things in eHealth***

Kashif Habib (Norwegian Computing Center, Norway); Wolfgang Leister (Norsk  
Regnesentral, Norway)

### ***Implementation of an Emergency Vehicle to Traffic Lights Communication System***

Nasser Al-Ostath (Ministry of Information, Kuwait); Zainab Al-Roudhan (Structural  
Aluminum Systems (SAS), Kuwait); Fatma Selityn (Ministry of Defense, Kuwait);  
Mohammed ElAbd (American University of Kuwait, Kuwait)

### **RCBR2015**

Chair: Layth Sliman (EFREI- Paris, France)

Room: Jade - R2

### ***Numerical Reproducibility: Feasibility Issues***

Philippe Langlois and Rafife Nheili (University of Perpignan Via Domitia, France);  
Christophe Denis (EDF R&D and CMLA-ENS Cachan, France)

### ***IPOL: a new journal for fully reproducible research; analysis of four years development***

Miguel Colom (Ecole Normale Supérieure de Cachan, France); Bertrand Kerautret  
(Université de Lorraine, LORIA & CNRS, France); Nicolas Limare (ENS de Cachan,  
France); Pascal Monasse (IMAGINE, LIGM-Université Paris Est, France); Jean-Michel  
Morel (ENS de Cachan, France)

### ***Kullback-Leibler divergence as an estimate of reproducibility of numerical results***

Florent Calvayrac (Institut des Molécules et Matériaux du Mans LUNAM UMR6283 &  
Université du Maine (le Mans), France)

### ***Towards Reproducible Cyber-Security Research through Complex Node Automation***

Sebastian Abt, Reinhard Stampf and Harald Baier (Hochschule Darmstadt / CASED,  
Germany)

**3:00 PM - 3:30 PM**

**Coffee Break – E200**

**3:30 PM - 4:30 PM**

**Keynote Speaker #3**

Room: Amphi B310

***Software networks***

Professor Guy Pujolle, University Pierre et Marie Curie - Paris 6,  
France



**4:30 PM - 5:00 PM**

**Best Paper Award and Closing Remark**

Room: Amphi B310



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### Conference Information

Conference Location: 46, rue Barrault - 75634 Paris Cedex 13, France

- The NTMS 2015 Gala dinner will be held at the "BISTRO PARISIEN" located at the foot of the Eiffel Tower.
  - Gate date is July 28<sup>th</sup>, 2015
    - Buses will depart at 18:30
    - Please inform registration desk about your attendance