<table>
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<tr>
<th>Period</th>
<th>Monday 3rd October</th>
<th>Tuesday 4th October</th>
<th>Wednesday 5th October</th>
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<tr>
<td>09:00 – 09:30</td>
<td>Opening ceremony</td>
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<td>09:30 – 10:30</td>
<td>K - 1</td>
<td>K - 2</td>
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<td></td>
<td>Aki Nakao</td>
<td>Holger Karl</td>
<td>Antonio Manzalini</td>
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<tr>
<td>10:30 – 11:00</td>
<td>Coffe Break / Demo</td>
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<td>11:00 – 13:00</td>
<td>TC - 1</td>
<td>TC - 4</td>
<td>SS - 3</td>
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<td>Federation, Migration, and Wireless</td>
<td>Data Center</td>
<td>Cloud in Robotics and Cyber Physical Systems</td>
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<td>13:00 – 14:30</td>
<td>Lunch</td>
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<tr>
<td>14:30 – 16:15</td>
<td>TC - 2</td>
<td>SS - 1</td>
<td>TC - 5</td>
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<td>Mobile Cloud and ICN</td>
<td>Security and Mobile Cloud</td>
<td>Software Defined Networking</td>
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<tr>
<td>16:15 – 16:45</td>
<td>Coffe Break / Demo</td>
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<td>16:45 – 18:00</td>
<td>TC - 3</td>
<td>SS - 2</td>
<td>TC - 6</td>
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<td>Virtual Network Functions</td>
<td>Cloud Benchmarking</td>
<td>Load Management and P2P</td>
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<td>18:00 – 19:30</td>
<td>Welcome cocktail</td>
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<td>19:30 – 21:30</td>
<td>Social Dinner</td>
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Monday, October 3

09:00 – 09:30
Opening Ceremony

Paolo Ghezzi, Deputy Mayor of the town of Pisa: “Welcome speech”

Stefano Giordano, CloudNet General Chair: “From Arpanet to the Cloud: 30 years of networking in Pisa”

Deep Medhi, CloudNet TPC Co-chair: “A greeting message from TPC Co-Chairs”

09:30 – 10:30
K-1: Keynote “Application Driven End-to-End Network Slicing, From UE To Cloud” by Aki Nakao, University of Tokyo, Japan

10:30 – 11:00
Coffee Break and Demo Session

11:00 – 13:00
TC-1: Federation, Migration, and Wireless
Session Chair: Silvana Muscella

Cost-Efficient Algorithms for Critical Resource Allocation in Cloud Federations
Makhlouf Hadji and Benjamin Aupetit (IRF SystemX, France); Djamal Zeghlache (Institut Mines-Telecom, Telecom SudParis & UMR 5157 CNRS - Samovar, France)

A Virtual Network PaaS for 3GPP 4G and Beyond Core Network Services
Mohammad Abu-Lebdeh, Sami Yangiui, Diaa Naboulsi and Roch Glibtho (Concordia University, Canada); Constant Wette Tchouati (Ericsson, Canada)

GRECO: A Distributed Genetic Algorithm for Reliable Application Placement in Hybrid Clouds
Ruben Mennes (University of Antwerp, Belgium); Bart Spinnewyn and Steven Latre (University of Antwerp - iMinds, Belgium); Juan Felipe Botero (Universidad de Antioquia, Colombia)

Bandwidth management VMs live migration in wireless fog computing for 5G networks
Danilo Amendola, Nicola Cordeschi and Enzo Baccarelli (Sapienza University of Rome, Italy)

Minimizing Live VM Migration Downtime Using OpenFlow based Resiliency Mechanisms
Cristian Hernandez Benet, Kyoomars Alizadeh Noghani and Andreas J. Kassler (Karlstad University, Sweden)

IaaS Migration Using the FELIX Federated Testbed
Atsuho Takefusa (National Institute of Informatics, Japan); Jason Haga, Fumihiro Okazaki, Katsuhiko Ookubo, Seiya Yanagita and Ryousei Takano (National Institute of Advanced Industrial Science and Technology (AIST), Japan); Tomohiro Kudoh (The University of Tokyo, Japan)

13:00 – 14:30
Lunch

14:30 – 16:15
TC-2: Mobile Cloud and ICN
Session Chair: Brunilde Sansò

Smart Probabilistic Fingerprinting for Indoor Localization over Fog Computing Platforms
Andrea Sciarraone (University of Genoa, Italy); Claudio Fiandrino (University of Luxembourg); Igor Bisio and Fabio Lavagetto (University of Genoa, Italy); Dzmitry Kliazovich and Pascal Bouvry (University of Luxembourg)

Improving Multipath TCP for Latency Sensitive Flows in the Cloud
Wei Wang (Institute of Computing Technology, CAS & University of Chinese Academy of Science, P.R. China); Liang Zhou (University of California, Riverside, USA); Yi Sun (ICT, CAS, P.R. China)

Energy-efficient and fault-tolerant mobile cloud storage
Chien-An Chen and Radu Stoleru (Texas A&M University, USA); Geoffrey G Xie (Naval Postgraduate School, USA)

Enhancing Content Distribution through Information-Aware Mechanisms
Walid Benchaïta (University Pierre et Marie Curie - UPMC, France); Gioacchino Tangari (UCL, United Kingdom); Samir Ghamri-Doudane (Nokia Bell Labs, France); Sebastien Tixeuil (University Pierre & Marie Curie, France)

Multi-user Mobile Cloud Offloading Game with Computing Access Point
Meng-Hsi Chen (University of Toronto, Canada); Min Dong (University of Ontario Institute of Technology, Canada); Ben Liang (University of Toronto, Canada)

16:15 – 16:45
Coffee Break and Demo Session

16:45 – 18:00
TC-3: Virtual Network Functions
Session Chair: Lukas Kencl

Joint Power Scaling of Processing Resources and Consolidation of Virtual Network Functions
Roberto Bruschi (CNIT, Italy); Franco R. Davoli (University of Genoa & CNIT, Italy); Paolo Lago and Jane Frances Pajo (University of Genoa, Italy)

Transparent Optimization of Inter-Virtual Network Function Communication in Open vSwitch
Mauricio Vasquez Bernal (Politecnico di Torino, Colombia); Ivano Cerrato and Fulvio Risso (Politecnico di Torino, Italy); David Verbeiren (Intel Corporation NV/SA, Belgium)

Enabling NFV Services on Resource-Constrained CPEs
Roberto Bonafiglia and Sebastiano Miano (Politecnico di Torino, Italy); Sergio Nuccio (Telecom Italia, Torino, Italy); Fulvio Risso and Amedeo Sapio (Politecnico di Torino, Italy)

Energy-Aware Placement and Scheduling of Network Traffic Flows with Deadlines on Virtual Network Functions
Tuesday, October 4

09:30 – 10:30  K-2: Keynote “Application challenges for networks” by Holger Karl, Paderborn University, Germany
10:30 – 11:00  Coffee Break and Demo Session
11:00 – 13:00  TC-4: Data Center
   Session Chair: Andreas Kessler
   Evaluation of Data Center Network Topology Influence on Hadoop MapReduce Performance
   Ondrej Tomanek, Zdenek Kouba and Lukas Kenc (Czech Technical University in Prague, Czech Republic)
   Augmented data center infrastructure management system for minimizing energy consumption
   Yutaka Nakamura, Kazuhiro Matsuda and Morito Matsuoka (Osaka University, Japan)
   Multi Objective Virtual Machine Allocation in Cloud Data Centers
   Giuseppe Portaluri and Stefano Giordano (University of Pisa, Italy)
   On the network performance of Amazon S3 cloud-storage service
   Valerio Persico (University of Napoli, Italy); Antonio Montieri (NM2 srl (Italy), Italy); Antonio Pescapé (University of Napoli Federico II, Italy)
   Green Cloud Broker: Dynamic Virtual Machine Placement Across Multiple Cloud Providers
   Federico Laruimbe (Ecole Polytechnique de Montreal & GERAD, Canada); Brunilde Sansó (Ecole Polytechnique de Montreal, Canada)
   Model-Driven Policy Framework for Data Centers (Short Paper)
   Cosmin Caba, Angelos Mimidis Kentis and Jose Soler (DTU, Denmark)
13:00 – 14:30  Lunch
14:30 – 16:15  SS-1: Special Session in Security and Mobile Cloud
   Session Chair: Franco Davoli
   Application Specific Mobile Edge Computing through Network Softwarization
   Ping Du and Akimhi Nakao (The University of Tokyo, Japan)
   Seamless Support of Low Latency Mobile Applications with NFV-Enabled Mobile Edge-Cloud
   Binxu Yang, Wei Koong Chai and George Pavlou (University College London, United Kingdom); Konstantinos V. Katsaros (Intracom Telecom S.A., Greece)
   Validation of Non-Functional Requirements in Cloud Based Systems (Short Paper)
   Rashmi Phalnikar (MIT, COE, Pune University, India)
   CYCLONE: a Multi-Cloud Federation Platform For Complex Bioinformatics And Energy Applications (Short Paper)
   Domenico Gallico and Matteo Biancani (Interoute S.P.A., Italy); Christophe Blanchet, Mohamed Bedri and Jean-Francois Gibrat (CNRS - French Institute of Bioinformatics, France); José I Aznar (I2cat, Spain); Doris Hacker and Maria Kourkouli (QSC, Germany)
   SELFNET Virtual Network Functions Manager: a common approach for lifecycle management of NFV applications (Short Paper)
   Giacomo Bemini, Elian Kraja,Gino Carrozzo, Giada Landi and Nicola Ciulli (Nextworks, Italy)
   On The Breakeven Point Between Cloud-Assisted and Legacy Routing (Short Paper)
   Prasun K Dey (University of Nevada, Reno, USA); Murat Yuksel (University of Central Florida, USA)
16:15 – 16:45  Coffee Break and Demo Session
16:45 – 18:00  SS-2: Special Session Cloud Benchmarking
   Session Chair: Alessio Botta
   Towards Automated Cost-efficient Data Management for Federated Cloud Services
   Vincent C. Emekaro, Martin Bullman and John P. Morrison (University College Cork, Ireland)
   Efficient serving of VPN endpoints on COTS server hardware
   Daniel Raumer, Sebastian Gallenmüller, Paul Emmerich, Lukas Märdin and Georg Carle (Technische Universität München, Germany)
   Performance evaluation of edge cloud computing system for big data applications
   Mauro Femminella, Matteo Pergolesi and Gianluca Reali (University of Perugia, Italy)
   Container-based Service Chaining: a Performance Perspective
   Sergio Livi, Quentin Jacquemart, Dino Lopez Facheo and Guillaume Urvoy-Keller (Université de Nice Sophia-Antipolis, France)
19:30 – 21:30  Social Dinner at “Osteria all’Ussero”
   Villa di Corliano
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<td>Implementing virtual pheromones in BDI robots using MQTT and Jason</td>
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<td>TC-5: Software Defined Networking</td>
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<td>Session Chair: Antonio Cianfrani</td>
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<td>SDN-Guard: DoS Attacks Mitigation in SDN networks</td>
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<td>Middleware Platform for Distributed Applications Incorporating Robots, Sensors and the Cloud</td>
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<td>Analysis of Control Traffic in a Geo-distributed Collaborative Cloud</td>
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<td>Session Chair: Fulvio Risso</td>
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<td>Towards Decentralized Repository Services for Efficient and Transparent Virtual Machine Operations: The ENTICE Approach</td>
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Wednesday, October 5

**K-3: Keynote “Towards Artificially Intelligent Networks” by Antonio Manzalini (Telecom Italia, Italy)**

**Coffee Break and Demo Session**

**SS-3: Special Session in Cloud in Robotics and Cyber Physical Systems**

**Session Chair: Davide Bacciu**

- User Routine Model using a Cloud-Connected Social Robot
- Relieving robots from their burdens: The Cloud Agent concept (Short Paper)
- The GiraffPlus experience: from Laboratory Settings to Sites Robustness (Short Paper)
- Implementing virtual pheromones in BDI robots using MQTT and Jason (Short Paper)

**Coffee Break and Demo Session**

**TC-5: Software Defined Networking**

**Session Chair: Antonio Cianfrani**

- SDN-Guard: DoS Attacks Mitigation in SDN networks
- Middleware Platform for Distributed Applications Incorporating Robots, Sensors and the Cloud
- Analysis of Control Traffic in a Geo-distributed Collaborative Cloud
- Performance Debugging in SDN Controllers - A Case Study (Short Paper)
- Implementing a Smart SDN Switch with LISP Control Plane as Network Function (Short Paper)
- Cloud networks for ERTMS railways systems (Short Paper)

**Coffee Break and Demo Session**

**TC-6: Load Management and P2P**

**Session Chair: Fulvio Risso**

- Towards Decentralized Repository Services for Efficient and Transparent Virtual Machine Operations: The ENTICE Approach

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**Bus will leave at 7 p.m. from Abitalia Tower Plaza Hotel**
Kecskemeti (MTA SZTAKI, Hungary); Vlado Stankovski (University of Ljubljana, Slovenia); Radu Prodan and Thomas Fahringer (University of Innsbruck, Austria)

**Incentives for Mobile Cloud Environments through P2P Auctions**

Ismael Cuadrado-Cordero (INRIA & IRISA, France); Anne-Cécile Orgerie (CNRS & IRISA, France); Christine Morin (INRIA & IRISA, France)

**On Load Management in Service Oriented Networks** (Short Paper)

Ehsan Elahi, Jason Barron and Micheál Crotty (Waterford Institute of Technology, Ireland); Miguel Ponce de Leon (Waterford Institute of Technology & TSSG, Ireland); Rashid Mijumbi and Steven Davy (Waterford Institute of Technology, Ireland); Dimitri Staessens and Sander Vrijders (Ghent University - iMinds, Belgium)