

## **Wednesday 16 November**

### **Keynote 1 (9h00-10h00)**

**Chair: Dieter Fiems**

Gittins and Whittle Index Approaches to Queueing Problems

Samuli Aalto

### **Game Theory (10h00-11h15)**

**Chair: Yuming Jiang**

Strategic customer behaviors in observable multi-server batch service queueing systems with shared fee and server maintenance cost

Nakamura, Ayane; Phung-Duc, Tuan

Learning a Correlated Equilibrium with Perturbed Regret Minimization

Boufous, Omar; El-Azouzi, Rachid; Touati, Mikael; Altman, Eitan; Bouhtou, Mustapha

Cooperative Game Theoretic Analysis of Shared Services

Mitra, Anirban; Gupta, Manu; Hemachandra, Nanyala

### **Queueing Models (11h30-12h45)**

**Chair: Ioannis Dimitriou**

System Content Analysis for a Two-Class Queue where Service Times in a Busy Period Depend on the Presence of Class-2

Sasaninejad, Sara; Walraevens, Joris; Moradi, Hossein; Wittevrongel, Sabine

Asymptotic analysis of modified Erlang-B system with sensing time and stochastic loss of secondary users

Abe, Kazuma; Phung-Duc, Tuan

A product-form solution for a two-class Geo<sup>^</sup>Geo /D/1 queue with random routing and randomly alternating service

Devos, Arnaud; De Mynck, Michiel; Bruneel, Herwig; Walraevens, Joris

### **Applications (14h00-15h15):**

**Chair: Koen De Turck**

Short term wind turbine power output prediction

Kapodistria, Stella; Kolumban, Sandor; Noorae, Nazanin

A Domain Specific Language for the design of Artificial Intelligence applications for process engineering

Campanile, Lelio; Di Bonito, Luigi Piero; Gribaudo, Marco; Iacono, Mauro

Regret-Optimal Online Caching for Adversarial and Stochastic Arrivals

Faizal, Fathima Zarin; Singh, Priya; Karamchandani, Nikhil ; Moharir, Sharayu

**Thursday 17 November**

**Retrial Queues (9h00-10h15):**

**Chair: Stella Kapodistria**

Cyclic Retrial Queue for Building Data Transmission Networks

Paul, Svetlana; Nazarov, Anatoly; Phung-Duc, Tuan; Shulgina, Ksenia; Lizyura, Olga; Shashev, Dmitriy

The asymmetric join the shortest orbit queue: Analysis via a dimensionality reduction

Dimitriou, Ioannis

Asymptotic Diffusion Method for a Retrial Queue with State Dependent Service Rate

Fedorova, Ekaterina ; Nazarov, Anatoly; Lizura, Olga; Salimzyanov, Radmir

**Performance analysis (10h30-11h45)**

**Chair: Tuan Phung-Duc**

Understanding Slowdown in Large-Scale Heterogeneous Systems

Turchetta, William; Gardner, Kristen

Multi-Model Federated Learning with Provable Guarantees

Bhuyan, Neelkamal; Moharir, Sharayu; Joshi, Gauri

A Large Deviations Model for Latency Outage for URLLC

Elayoubi, Salah; Naddeh, Nathalie; Chahed, Tijani; Ben Jemaa, Sana

**Networking and Distributed Computing (14h00-15h40)**

**Chair: Esa Hyttiä**

Some Basic Properties of Length Rate Quotient

Jiang, Yuming

Robustness of the Tangle 2.0 Consensus

Lin, Bing-Yang; Daria Dziubałowska; Macek, Piotr; Penzkofer, Andreas; Müller, Sebastian

Renting Edge Computing Resources for Service Hosting

Madnaik, Aadesh; Moharir, Sharayu; Karamchandani, Nikhil

TAWNS - A Terrestrial Acoustic and Wireless Network Simulation Framework

Brüggemann, Leonhard;

**Keynote 2 (16h00-17h00)**

**Chair: Mor Harchol-Balter**

Red Light - Green Light Solution for Large Markov Chains

Nelly Litvak