SCHEDULE ECMS 2021

DAY 1 (May 31st) - all schedule in GMT

Time (GMT)		
7.30-8.00	**Welcome**	
8.00-9.00	**Keynote: Digital Twins for Computer Haptic-Assisted Orthopaedic Surgery**, *Webjørn Rekdalsbakken and Kjell-Inge Gjesdal*	
9.00-9.30	**Break**	
	Session 1.1: Simulation and Optimization	**Session 2: Modeling and Simulation for Performance Evaluation of Computer-based Systems**
	Session chair: Georgi Kostov	Session chair: Rostislav Razumchik
9.30-9.55	**Real-Time Digital Twin Of Research Vessel For Remote Monitoring** *Pierre Major, Guoyuan Li, Houxiang Zhang, Hans Petter Hildre*	**Modeling And Analyzing Cloud Auto-Scaling Mechanism Using Stochastic Well-Formed Coloured Nets** *Mohamed M. Ould Deye, Mamadou Thiongane, Mbaye Sene*
9.55-10.20	***Comparative Evaluation Of Lactobacillus Plantarum Strains Through Microbial Growth Kinetics*** *Georgi Kostov, Rositsa Denkova-Kostova, Vesela Shopska, Bogdan Goranov, Zapryana Denkova*	**Telling Faults From Cyber-Attacks In A Multi-Modal Logistic System With Complex Network Analysis** *Dario Guidotti, Giuseppe Cicala, Tommaso Gili, Armando Tacchella*
10.20-10.45	**Using Semantic Technology To Model Persona For Adaptable Agents** *Johannes Nguyen, Thomas Farrenkopf, Michael Guckert, Simon T. Powers, Neil Urquhart*	**Metadata For Root Cause Analysis** *Alexander A. Grusho, Nick A. Grusho, Michael I. Zabezhailo, Elena E. Timonina, Vladimir V. Senchilo*
10.45-11.10	**Differential Evolution Algorithm In Models Of Technical Optimization** *Roman Knobloch, Jaroslav Mlynek*	**Minimizing Mean Response Time In Batch-Arrival Non-Observable Systems With Single-Server FIFO Queues Operating In Parallel** *Mikhail Konovalov, Rostislav Razumchik*
11.10-12.10	**Lunch break**	
	Session 1.2: Simulation and Optimization	**Session 3: Open and Collaborative Models and Simulation Methods**
	Session chair: Marco Trost	Session chair: Henrique M. Gaspar
12.10-12.35	**A Robust And Adaptive Approach To Control Of A Continuous Stirred Tank Reactor With Jacket Cooling** *Roman Prokop, Radek Matusu, Jiri Vojtesek*	**Pedestrian Simulation In SUMO Through Externally Modelled Agents** *Daniel Garrido, Joao Jacob, Daniel Castro Silva, Rosaldo J. F. Rossetti*
13.00-13.25	**Robust Simulation Of Imaging Mass Spectrometry Data** *Anastasia Sarycheva, Anton Grigoryev, Evgeny N. Nikolaev, Yury Kostyukevich*	**MCX - An Open-Source Framework For Digital Twins** *Sajad Shahsavari, Eero Immonen, Mohammed Rabah, Mohammad-Hashem Haghbayan, Juha Plosila*
13.50-14.15	**Make-To-Order Production Planning With Seasonal Supply In Canned Pineapple Industry** *Kanapath Plangsrisakul, Tuanjai Somboonwiwat, Chareonchai Khompatraporn*	**Machine Learning Technology Overview In Terms Of Digital Marketing And Personalization** Anna Nikolajeva, Artis Teilans
14.15-14.45	**Break**	
	Session 1.3: Simulation and Optimization	**Session 4: Finite – Discrete - Element Simulation**
	Session chair: Tuanjai Somboonwiwat	Session chair: Peter T. Zwierczyk
14.45-15.10	**Modelling Player Combat Behaviour For NPC Imitation And Combat Awareness Analysis** *Paul Williamson, Christopher Tubb*	**Investigating The Load-Bearing Capacity Of Additively Manufactured Lattice Structures** *Janos P. Radics, Levente Szeles*
15.10-15.35	**Employment Of Temporary Workers And Use Of Overtime To Achieve Volume Flexibility Using Master Production Scheduling: Monetary And Social Implications** *Marco Trost, Thorsten Claus, Frank Herrmann*	**FE Model Of A Cord-Rubber Railway Brake Tube Subjected To Extreme Operational Loads On A Reverse Curve Test Track** *Gyula Szabo, Karoly Varadi*
15.35-16.00	**Change Detection For Area Surveillance Using A Moving Camera** *Tatsuhisa Watanabe, Tomoharu Nakashima, Yoshifumi Kusunoki*	**Analysis Of Tip Relief Profiles For Involute Spur Gears** *Jakab Molnar, Attila Csoban, Peter T. Zwierczyk*
16.00-16.25	**Planning Of Sustainable Energy Systems For Residential Areas Using An Open Source Optimization Tool And Open Data Ressources** *Heiko Driever, Ursel Thomssen, Marc Hanfeld*	**Implementation Of Bone Graft Adaptation's FE Model In HyperMesh** *Martin O. Doczi, Peter T. Zwierczyk, Robert Szoedy*

DAY 2 (June 1st) - all schedule in GMT

Time (GMT)		
	Session 5.1: Finance and Economics and Social Science	**Session 6: Business Process Modelling and Simulation for Industrial Operations**
	Session chair: Kata Váradi	Session chair: Romeo Bandinelli
8.25-8.50		**Application Of Multiagent Simulation Modeling To Forecast Milk Receiving Process** *Evgeny A. Nazoykin*
8.50-9.15	**Demographic And Statistical Modelling Of Grandfatherhood In Russia** *Oksana Shubat, Mark Shubat*	**Designing And Optimizing Production In A High Variety / Low Volume Environment Through Data-Driven Simulation** *Virginia Fani, Bianca Bindi, Romeo Bandinelli*
9.15-9.40	**Models For Forecasting The Number Of Russian Grandparents** *Anna Bagirova, Oksana Shubat*	**Evaluation Of Algorithm Performance For Simulated Square And Non-Square Logistic Assignment Problems** *Maximilian Selmair, Sascha Hamzehi, Klaus-Juergen Meier*
9.40-10.10	**Break**	
10.10-10.35		**Session 1.4: Simulation and Optimization** Session chair: Carlo Simon
	Factor Modeling Of Russian Women's Perceptions of Combining Family And Career *Natalia Blednova, Anna Bagirova*	**Capacity Loss Estimation For Li-Ion Batteries Based On A Semi-Empirical Model** *Mohammed Rabah, Eero Immonen, Sajad Shahsavari, Mohammad-Hashem Haghbayan, Kirill Murashko, Paula Immonen*
10.35-11.00	**Clearinghouses Versus Central Counterparties From Margin Calculation Point Of View** *Melinda Friesz, Kata Varadi*	**Research-Agenda For Process Simulation Dashboards** *Carlo Simon, Stefan Haag, Lara Zakfeld*
11.00-12.00	**Lunch break**	
	Session 5.2: Finance and Economics and Social Science	**Session 7: Machine Learning for Big Data**
	Session chair: Agnes Vidovics-Dancs	Session chair: Frederic Theodor Stahl
12.00-12.25	**Macroeconometric Input-Output Model For Transport Sector Analysis** *Velga Ozolina, Astra Auzina-Emsina*	**On The Effect Of Decomposition Granularity On DeTraC For COVID-19 Detection Using Chest X-Ray Images** *Nicole P. Mugova, Mohammed M. Abdelsamea, Mohamed M. Gaber*
12.25-12.50	**Establishing A Basis For Decision Support Modelling Of Future Zero Emissions Sea Based Tourism Mobility In The Geiranger Fjord Area** *Boerge Heggen Johansen*	**Towards Intrusion Detection Of Previously Unknown Network Attacks** *Saif Alzubi, Frederic T. Stahl, Mohamed M. Gaber*
12.50-13.15	**Modelling Economic Crises In Hua He Framework** *Nora Felfoeldi-Szuecs, Peter Juhasz, Gabor Kuerthy, Janos Szaz, Agnes Vidovics-Dancs*	**Data Stream Harmonization For Heterogeneous Workflows** *Eleftherios Bandis, Nikolaos Polatidis, Maria Diapouli, Stelios Kapetanakis*
13.15-13.40	**Discrete Event Simulation Of The COVID-19 Sample Collection Point Operation** *Martina Kuncova, Katerina Svitkova, Alena Vackova, Milena Vankova*	**Predicting Next Touch Point In A Customer Journey: A Use Case In Telecommunication** *Marwan Hassani, Stefan Habets*
13.40-14.10	**Break**	
14.10-17.10	**Tutorial prof. Trivedi:** *Reliability and availability of hardware-software systems*	
17.10-17.40	**Final Greetings**	