

SCHEDULE ECMS 2022

Author names written in **orange**: video/online presentation

Time (CET)		TUESDAY May 31st - All Schedule in CET	
15:00-17:00		Registration and Reception	
Time (CET)		DAY 1 WEDNESDAY (June 1st) - All Schedule in CET	
08:00-14:00		Registration Office Open	
08:30-09:00		Welcome & Opening Session	
09:00-10:00		Keynote 1: On the role of Modeling and Simulation for Artificial Intelligence, Prof. Hussein Abbass	
10:00-10:30		Coffee Break	
		Session 1.1: SIMO 1 (Room: Marco Polo)	Session 2: BPMI (Room: Møretanken)
		<i>Session chair: Frank Schaeffer and Florian Haas</i>	<i>Session chair: Romeo Bandinelli</i>
10:30-10:55	A Simple Algorithm Selector For Continuous Optimisation Problems <i>Tarek A. El-Mihoub, Christoph Tholen, Lars Nolle</i>	Optimization Of Internal Logistics Using A Combined BPMN And Simulation Approach <i>Maximilian Wuennenberg, Benjamin Wegerich, Johannes Fottner</i>	
10:55-11:20	Optimised Bumblebee Paths As Search Strategy For Autonomous Underwater Vehicle <i>Christoph Tholen, Lars Nolle, Tarek A. El-Mihoub, Oliver Zielinski</i>	Simulating The Automation Of Sorting Crates – A Stepwise Approach <i>Armand Misund, Henrike M. Gaspar</i>	
11:20-11:45	Emission Reduction Through Production Scheduling By Priority Rules And Energy Onsite Generation <i>Hajo Terbrack, Thorsten Claus, Frank Herrmann</i>	A Data-Driven Approach For Process Simulation Optimization: A Case Study <i>Romeo Bandinelli, Andrea Nunziatini, Virginia Fani, Bianca Bindi</i>	
11:45-12:10	Supply Chain Resilience Management Using Process Mining <i>Frank Schaeffer, Frank Morelli, Florian Haas</i>	Towards A Meta-Modeling Approach For An IoRT-Aware Business Process <i>Najla Fattouch, Imen Ben Lahmar, Khouloud Boukad</i>	
12:10-13:10	Lunch break		
		Session 1.2: SIMO 2 (Room: Marco Polo)	Session 3: CPS / FES 1 paper (Room: Møretanken)
		<i>Session chair: Carlo Simon</i>	<i>Session chair: Saleh A.A Alaliyat / FES track paper Kata Varadi</i>
13:10-13:35	Stratification Of Timed Petri Nets At The Example Of A Production Process <i>Carlo Simon, Stefan Haag, Lara Zakfeld</i>	Modelling AGV Operation Simulation With Lithium Batteries In Manufacturing <i>Ozan Yesilyurt, Marius Kurrle, Andreas Schlereth, Miriam Jaeger, Alexander Sauer</i>	
13:35-14:00	Microbial Growth Of Lactobacillus Delbrueckii Ssp. Bulgaricus B1 In A Complex Nutrient Medium (MRS-Broth) <i>Georgi Kostov, Rositsa Denkova-Kostova, Vesela Shopaska, Bogdan Goranov, Zapryana L</i>	On The Use Of Graphical Digital Twins For Urban Planning Of Mobility Projects: A Case Study From A New District In Ålesund, Norway <i>Pierre Major, Andreas Amundsen, Ricardo Da Silva Torres, Pernille Stadsnes, Egil Mikalsen</i>	
14:00-14:25	A Model For Predicting The Amount Of Photosynthetically Available Radiation From BGC-ARGO Float Observations In The Water Column <i>Frederic Stahl, Lars Nolle, Ahlem Jemai, Oliver Zielinski</i>	Digital Twins For Lighting Analysis: Literature Review, Challenges, And Research Opportunities <i>Muhammad Umair Hassan, et al.</i>	
14:25-14:50	Calibration Model For Perceptual Compensation Of Defective Pixels Of Self-Emitting LEDs <i>Olga A. Basova, Anton Grigoryev, Dmitry P. Nikolaev</i>	Forecasting Models For First Year Premium Of Life Insurance - FES Track paper talk <i>Somsri Banditvilai</i>	
14:50-15:30	Coffee Break		
15:30-20:00	Students will walk us to Sunnmøre Museum -with boat excursion or guided museums tour (food and drinks provided)		
14:00-15:30	ECMS Board Meeting, Room: Roald Amundsen 5th floor		

Time (CET) DAY 2 THURSDAY (June 2nd) - All Schedule in CET

08:00-14:00

Registration Office Open

09:00-10:00

Keynote 2: Building An Open-Source Community For Subsurface Flow Simulation, Prof. Knut-Andreas Lie

10:00-10:30

Coffee Break

Session 1.3: SIMO 3 (Room: Marco Polo)

Session 4: PSTAT (Room: Møretanken)

Session chair: *Hajo Terbrack*

Session chair: *Armando Tacchella*

10:30-10:55

Improve The Output Quality Of Adaptive Process Chains With AI And Optimization
Thomas Husslein, Christian Otto

Effect Of Impurities On Stability Of The Skyrmion Phase In A Frustrated Heisenberg Antiferromagnet
Mariia Mohyl'na, Milan Zukovic

10:55-11:20

How To Run A World Record? A Reinforcement Learning Approach
Sajad Shahsavari, Eero Immonen, Masoomeh Karami, Hashem Haghbayan, Juha Plosila

Massive Degeneracy And Anomalous Thermodynamics I In A Highly Frustrated Ising Model On Honeycomb Lattice
Milan Zukovic

11:20-11:45

Synergy Between Shuttles And Stacker Cranes In Dynamic Hybrid Pallet Warehouses: Control Strategies And Performance Evaluation
Giulia Siciliano, Yue Yu, Johannes Fottner

Some Ergodicity And Truncation Bounds For A Small Scale Markovian Supercomputer Model
Rostislav Razumchik, Alexander Romyantsev

11:45-12:10

Elongated Boundaries Detector Parameters Optimisation Based On Generation Of Synthetic Data From Aerial Imagery
Ekaterina Panfilova, Anton Grigoryev, Vladimir Burmistrov

12:10-13:10

Lunch break

Session 5.1: DIS 1 (Room: Marco Polo)

Session 6.1: FES 1 (Room: Møretanken)

Session chair: *Agnieszka Jakobik*

Session chair: *Kata Varadi*

one talk already given Wednesday 14:25 - 14:50

13:10-13:35

Causal Analysis Graph Modeling For Strategic Decisions
Alexander H. Levis, Amy Sliva

Reflections On Assumptions For A Simulation Model Of Dental Caries Prevention Planning In A Primary School
Maria Hajlasz, Bozena Mielczarek

13:35-14:00

Epistemic Games With Conditional Beliefs For Modelling Security d Threats Defence In Clou Computing Svstems
Lukasz Gaza, Agnieszka Jakobik

Comparison Of Separated Families' Standard Of Living In Germany: Analyzing The Equalised Incomes In Simulated Families After Child Support And Child Benefit Paid
Erzsebet Terez Varga

14:00-14:25

Simulating The Programmable Networks For HLA Compatible High-Performance Simu
Kayhan M. Imre

European Quality Of Life In Retirement - Analyzing Personal Differences Based On SHARE Data
Sara Szanyi-Nagy, Erzsebet Kovacs, Agnes Vaskoevi

14:25-14:50

Agent And Evolutionary-Based Modelling And Simulation Of A Simplified Living System
Adrian Sosnicki, Daniel Grzonka, Lukasz Gaza

Rising Regional Importance Of The Renminbi In The Asia-Pacific Area: A Panel Analysis
Eszter Boros, Gabor Sztano

14:50-15:10

Coffee Break

Session 7: FDEM (Room: Marco Polo)

Session 6.2: FES2 (Room: Møretanken)

Session chair: *Peter T. Zwierczyk*

Session chair: *Kata Varadi*

15:10-15:35 **FEM Study On The Strength Increasing Effect Of Nitrided Spur Gears**

Jakab Molnar, Peter T. Zwierczyk, Attila Csoban

Implied Volatility Based Margin Calculation On Cryptocurrency Markets

Balazs Kralik, Nora Felfoeldi-Szuecs, Kata Varadi

15:35-16:00 **Development Of A 2D Discrete Element Software With LabVIEW t**

For Contact Model Improvemen And Educational Purposes

Laszlo Pasthy, Jozsef Graeff, Kornel Tamas

Regional Models Of Corporate Sector Development In Russia:

Where Does Family-Friendly Policy Matter Most? (A Study Based On Cluster Analysis)

Anna Bagirova, Oksana Shubat

16:00-16:25 **Application Of The Extended Finite Element Method In The Aim Of Examination Of Cr**

Propagation In Railway Rails

Daniel Bobis, Peter T. Zwierczyk, Tamas Mate

Identifying Regional Models Of Active Grandparenting In Russia

Based On Cluster Analysis

Oksana Shubat, Irina Shmarova

16:25:16:50 **Application Of The Finite Element Method To Determine The Velocity Profile In An Open Channel**

Daria Wotzka

17:00

5 pm private bus leaves NMK and brings us downtown

18:15

6:15 Meet at main Bus station (Ålesund Rutebilstasjon): same Bus brings us up to AKSLA Hill for the Dinner

18:30-22:00

Conference Dinner at FJELLSTUA AKSLA 6007 Aalesund on top of the famous hill

in case you want to walk up to Aksla - feel free to do so

you may drive with car or taxi yourself

BUS will bring us back to hotels and bus station after 10 pm

Time (CET)

DAY 3 FRIDAY (June 3rd) - All Schedule in CET

09:00-10:00

Keynote 3: Modeling for using Deep learning, *Prof. Manish Gupta*

10:00-10:30

Coffee Break

Session 5.2: DIS 2 (Room: Marco Polo)

Session 8: SST (Room: Møretanken)

Session chair: *Daniel Grzonka*

Session chair: *Di Wu*

10:30-10:55 **Formal Verification Of Neural Networks:**

A Case Study About Adaptive Cruise Control

Stefano Demarchi, Dario Guidotti, Andrea Pitto, Armando Tacchella

GENOR: A Generic Platform For Indicator Assessment In City Planning

Leo Leplat, Ricardo da Silva Torres, Dina Aspen, Andreas Amundsen

10:55-11:20 **Predicting Performance Of Heterogeneous AI Systems With Discrete-Event Simulation**

Vyacheslav Zhdanovskiy, Lev Teplyakov, Anton Grigoryev

Heuristic Techniques For Reducing Energy Consumption Of Household

Sarah M. Daragmeh, Anniken Th. Karlsen, Ibrahim A. Hameed

11:20-11:45 **Time Series Clustering With Different Distance Measures**

To Tell Web Bots And Humans Apart

Grazyna Suchacka

Learned Parameterized Convolutional Approximation Of Image Filters

Olga Chaganova, Anton Grigoryev

11:45-12:10 **A DSL-Based Modeling Approach For Energy Harvesting IoT / WSN**

Lelio Campanile, Mauro Iacono, Fiammetta Marulli, Marco Gribaudo, Michele Mastroianni

12:15-12:30

Closing session

12:30

Lunch break