I3M Multiconference Program

I3M: The 11th International Multidisciplinary Modelling & Simulation Multiconference

General Chair
Agostino G. Bruzzone - DIME - University of Genoa, Italy
Yuri Merkuryev - Department of M&S, Riga TU, Latvia

Program Co-Chair
Francesco Longo - MSC-LES, DIMEG, University of Calabria, Italy
Emilio Jiménez - La Rijoia University, Spain

EMSS: The 26th European Modelling & Simulation Symposium,

EMSS General Chairs:
Francesco Longo, MSC-LES, DIMEG, University of Calabria, Italy
Emilio Jiménez, University of La Rioja

EMSS Program Chairs:
Michael Affenzeller, Upper Austrian University of Applied Sciences, Austria
Lin Zhang, Beihang University, China

HMS: The 16th International Conference on Harbour, Maritime & Multimodal Logistics Modelling and Simulation

HMS General Chairs:
Agostino Bruzzone, DIMEG, University of Genoa, Italy
Yury Merkuryev, Riga Technical University, Latvia
HMS Program Chair:
Claudia Frydman, LSIS, France
David Del Rio, Proyfe Group, Spain

MAS: The 13rd International Conference on Modelling & Applied Simulation

MAS General Chairs:
Marina Massei, Liophant Simulation, Italy
Adriano Solis, York University, Canada
MAS Program Chairs:
Fabio De Felice, University of Cassino, Italy

DHSS: The 4th International Defense and Homeland Security Simulation Workshop

DHSS General Chairs:
Agostino Bruzzone, MITIM DIME, University of Genoa, Italy
John A. Sokolowski, Virginia Modeling, Analysis and Simulation Center, VA, USA
DHSS Program Chair:
Robert Sottilare, US Army, USA

I_WISH: The 3rd International Workshop on Innovative Simulation for Health Care

I_WISH General Chairs:
Marco Frascio, University of Genoa, Italy
Vera Novak, BIDMC, Harvard Medical School, USA

SESDE: The 2nd International Workshop on Simulation for Energy, Sustainable Development & Environment

SESDE General Chairs:
François E. Cellier, ETH Zürich, Switzerland
Janos Sebestyen Janosy, MTA EK Centre for Energy Research Hungarian Academy of Sciences
SESDE Program Chair:
Gregory Zacharewicz, IMS Université Bordeaux, France

I3M: The International Multidisciplinary Modelling & Simulation Multiconference involves EMSS, MAS, HMS, DHSS, I_WISH, SESDE and related Workshops and Special Sessions; All Sessions are open to all I3M Attendees

EMSS: European Modelling & Simulation Symposium, 26th Edition, Part of I3M2014

MAS: The International Conference on Modelling & Applied Simulation, 13th Edition, Part of I3M2014

IMAACA: The International Conference on Integrated Modeling and Analysis in Applied Control and Automation is now a bi-annual conference, therefore it will be held during I3M2015

HMS: The International Conference on Harbour, Maritime & Multimodal Logistics Modelling and Simulation, 16th Edition, Part of I3M2014

DHSS: The International Defense and Homeland Security Simulation Workshop, 4th Edition, Part of I3M2014

I_WISH: The International Workshop on Innovative Simulation for Healthcare, 3rd Edition, Part of I3M 2014

SESDE: The International Workshop on Simulation for Energy, Sustainable Development & Environment, 2nd edition, Part of I3M 2014

Special Session: I3M Special Session freely open to all the attendees (i.e. Plenary Joint Opening, I3M 2015 Special session, etc.)

I3M Event: A Special I3M Event (I3M Gala Dinner) is open to I3M / DHSS/ EMSS/ HMS/ IMAACA/ MAS/IWISH/SESDE Attendees

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Wednesday 2014-09-10 9:00-10:30
Joint I3M Opening - Auditorium de l'Agora
Welcome Address I3M, Prof.Agostino G. Bruzzone, DIME, University of Genoa, Italy

Conferences, Societies and Networks Welcome
- University of Bordeaux Welcome - Prof. Yves Ducq, University of Bordeaux
- EMSS Conference - Prof. Francesco Longo, MSC-LES, University of Calabria, Italy
- HMS Conference - Prof. Yuri Merkuryev, Riga Technical University, Latvia
- MAS Conference - Prof. Adriano Solis, York Unversity, Canada
- DHSS Workshop - Prof. Agostino Bruzzone, University of Genoa, Italy
- I_WISH Workshop - Prof.Emilio Jimenez, La Rioja University, Spain

- SESDE Workshop - Gregory Zacharewicz, University of Bordeaux, France
- I_M_CS - Prof. Gerson Cunha, LAMCE/COPPE/UFRJ, Brasil
- Liophant - Dr. Marina Massei, University of Genova, Italy
- Simulation Team - Prof. Miquel Angel Piera, UAB, Spain
- MISS and M&Snet - Prof. Lin Zhang, Beihang University, China
- Conference Updates

Wednesday 2014-09-10 10:30-11:00

COFFEE BREAK Co-Sponsored by CAL-TEK, LIO Tech, MAST, SIM4FUTURE

Wednesday 2014-09-10 11:00-12:30
Joint I3M Opening - Auditorium de l'Agora
Plenary Speeches:

Prof. Bernie Zeigler, Chief Scientist, RTSync Cort
How Can DEVS Modeling and Simulation Theory Help Simulationists?

Prof. Janos Sebestyen JANOSY, Atomic Energy Research Institute, Hungary
Smartgrid, the intelligent energy distribution network

Prof. Yves Ducq, University of Bordeaux, France
An exhaustive overview and comparisons of Performance Measurement Methods before simulation:
from the past to the definition of a generalised framework

All Around for I3M Conference Pictures

Wednesday 2014-09-10 12:30-14:00
LUNCH Co-Sponsored by Lio-Tech, CAL-TEK, MAST, SIM4FUTURE

Wednesday 2014-09-10 14:00-15:30
Room: Auditorium de l'Agora
EMSS-MAS: Agent Directed Simulation - Session I
Chair(s): Tuncer Ören, University of Ottawa; Emilio Jiménez, University of La Rioja

EMSS_46: A multi-agent model of typical competitive bidding process in construction
Ronald Ekyalimpa, Simaan AbouRizk
University of Alberta - Canada

EMSS_67: On the search for novel simulation application to support airport operations management
Olusola Theophilus Faboya, Peer-Olaf Siebers
College of Education of Ikere; University of Nottingham - Nigeria/ UK

EMSS_85: Two stage simulation use in project verification and validation
Egils Ginters, Artis Aizstrauts, Miquel-Angel Piera Eroles, Roman Buil
University of Applied Sciences; Universitat Autònoma de Barcelona - Latvia/ Spain

EMSS_41: BankSim: a bank payments simulator for fraud detection research
Edgar Alonso Lopez-Rojas, Stefan Axelsson

Blekinge Institute of Technology - Swedish

MAS_29: Study of the interactions between stakeholders by a multi-agents system: application to the governance of natural resources in Miarinarivo district (Madagascar)
Aurélie Gaudieux, Yassine Gangat, Joël Kwan, Rémy Courdier
University of La Réunion - France

Wednesday 2014-09-10 14:00-15:30
Room: Badiene
MAS: Decision Support Systems Applications - Session I
Chair(s): Fabio De Felice, University of Cassino, Antonella Petrillo, University of Cassino

MAS_32: Model-based prediction of IT service availability – A literature review
Sascha Bosse, Matthias Splieth, Klaus Turowski
University of Magdeburg - Germany

MAS_33: Analysis of simulation tools for determining the energy consumption of data centers for cloud computing
Matthias Splieth, Sascha Bosse, Klaus Turowski
University of Magdeburg - Germany

MAS_14: An integrated simulation model for site layout planning of tunnelling projects
SeyedReza RazaviAlavi, Simaan AbouRizk
 University of Alberta - Canada

MAS_24: Assessing risk and uncertainty: a combined approach based on AHP method
Fabio De Felice, Antonella Petrillo
University of Cassino; University of Genoa; University of Calabria; University of Naples Parthenope - Italy

MAS_43: Model transformation from BPNM format to OpenERP workflow
Zhe Liu, Gregory Zacharewicz
University of Bordeaux - France

Wednesday 2014-09-10 14:00-15:30
Room: Patio
MAS: Workshop on Modeling and Simulation of Food Processing and Operations- Session I
Chair(s): Eleonora Bottani, University of Parma; Giuseppe Vignali University of Parma

MAS_1: Evaluation and modeling some engineering properties of safflower seeds
Feizollah Shahbazi
Lorestan University - Iran

MAS_19: Development of a "Numerical Ham" model that couples water and salt transfers to proteolysis during the dry-cured ham process
Rami Harkouss, Cyril Chevarin, Jean-Dominique Daudin, Pierre Sylvain Mirade
INRA - France

MAS_34: CFD simulation of autoclave process for retort flexible packaging
Matteo Folezzani, Michele Manfredi, Giuseppe Vignali
University of Parma - Italy

MAS_35: Temperature analysis of the water supply system of a dairy company by means of a simulation model
Davide Marchini, Marta Rinaldi, Roberto Montanari, Eleonora Bottani, Federico Solari
University of Parma - Italy

Wednesday 2014-09-10 14:00-15:30
Room: Amphithéâtre J.P. DOM IMS
EMSS: Advanced Models and Applications of Logistics & Manufacturing - Session I
Chair(s): Teresa Murino, University of Naples Federico II, Liberatina Santillo University of Naples Federico II

EMSS_136: Disaster and emergency management simulation in industrial plants
Agostino G. Bruzzone, Marco Frascio, Francesco Longo, Alessandro Chiurco, Simone Zanoni, Lucio Zavanella, Paolo Fadda, Gianfranco Fancello, Domenico Falcone, Fabio De Felice, Antonella Petrillo, Pasquale Carotenuto
University of Genoa; University of Calabria; University of Brescia; University of Cagliari; University of Cassino; University of Naples "Parthenope"; IAC CNR - Italy

EMSS_94: Modeling the multi-compartment vehicle routing problem with stochastic demands
Jan Melechovsky
University of Economics - Czech Republic

EMSS_87: Utilization of computer simulation for the detection non-standard situations within the new data layer of railway network model
Jan Fikejz, Emil Rezanina
University of Pardubice - Czech Republic

EMSS_140: The industrial plants relocation: issues, policies, procedures and algorithms for disassembly and reassembly phases
Massimo De Falco, Pellegrino Gaita, Mario Ilsami, Liberatina Carmela Santillo
University of Salerno; University of Naples - Italy

EMSS_137: A system dynamics approach for improving container terminal operations
Giuseppe Converso, Mosè Gallo, Teresa Murino
University of Naples - Italy

Wednesday 2014-09-10 14:00-15:30
Room: Salle de conférences IMS
SESDE: Simulation pro Energy and Environment - Session I
Chair(s): Janos Sebestyen Janosy, MTA EK

SESDE_35: A preliminary exploration on the global building energy efficiency
Chenxia Jia
Sichuan College of Architectural Technology - China

SESDE_36: Modelling and simulation to design multi-storey timber building using multi-objective particle swarm optimisation
Stephanie Armand Decker, Amadou Ndiaye, Alain Sempey, Philippe Galimard, Marie Pauly, Philipe Lagiere, Frederic Bos
University of Bordeaux; INRA; I2M; USC; Nobatek-INEF4 - France

SESDE_89: Electricity consumption patterns in households

Fermin Mallor, José Antonio Moler, Henar Urmeneta
Public University of Navarre - Spain

SESDE_192: Taking human behaviour into account in energy consumption simulation
Eric Ferreri, Jean-Marc Salotti, Pierre-Alexandre Favier
Bordeaux University - France

Wednesday 2014-09-10 15:30-16:00

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Wednesday 2014-09-10 16:00-17:30
Room: Auditorium de l'Agora
EMSS-IWISH: Simulation and Modelling for Occupational Health and Safety - Session I
Chair(s): Riccardo Melloni, Univ. of Modena and Reggio Emilia; Sergio Gallo, Univ. of Modena and Reggio Emilia

EMSS_36: On the approximate solution for a fully coupled parabolic-hyperbolic PDES system applied in thermomechanical behaviour of hydrogel matrix used in drug delivery
Nirina Santatriniaina, Benjamain Boutin, Eric Darrigrand, Fabrice Mahé, Nicolas Crouseilles, Dominique Pioletti, Lalaonirina Rakotomanana
University of Rennes; Swiss Institute of Lausanne - France/ Switzerland

EMSS_57: Digital human models (DHM) to simulate meat processing to prevent work related Musculoskeletal disorders (WR-MSDS)
Sergio Amedeo Gallo, Riccardo Melloni, Simone Mosconi, Francesco Longo
 University of Modena and Reggio Emilia; University of Calabria - Italy

EMSS_64: Towards a methodology for human behaviour elicitation: preliminary results
João Emilio Almeida, Rosaldo J.F. Rossetti, Brígida Monica Faria, João Tiago Jacob, Antóio Leça Coelho
University of Porto; LNEC - Portugal

EMSS_138: Innovation in hospitals: an e-procurement model in pharmacy operations in day surgery
Piera Centobelli, Giuseppe Converso, Antonio De Iasi, Teresa Murino
University of Naples - Italy

EMSS_139: Health worker monitoring: Kalman-based software design for fault isolation in human breathing
Improta Giovanni, Natale Pasquale, Santillo Liberatina Carmela, Triassi Maria
University of Naples - Italy

Wednesday 2014-09-10 16:00-17:30
Room: Badiene
EMSS: Simulation Optimization Approaches in industry, aviation, services and transport - Session I
Chair(s) Idalia Flores, University of Mexico; Miguel Mújica Mota, Amsterdam University of Applied Sciences

EMSS_116: Single sourcing vs. double sourcing: a simulation approach for supplier selection
Mattia Armenzoni, Marta Rinaldi, Roberto Montanari, Eleonora Bottani, Federico Solari
University of Parma - Italy

EMSS_32: Methodology for failure analysis in service processes through simulation
Oroselfia Sánchez, Idalia Flores
Universidad Nacional Autónoma de México - Mexico

EMSS_37: Simulation optimization for a vaccine distribution strategy against the spread of a (H1N1) epidemic.
Javier Lara de Paz, Idalia Flores
University of Mexico - Mexico

EMSS_39: A mono parameter analysis on a simulation model to support GALB heuristic optimization algorithms based on resource balancing
Sergio A. Gallo, Giovanni Davoli, Andrea Govoni, Francesco Longo, Riccardo Melloni, Teresa Murino
University of Modena and Reggio Emilia; University of Calabria; University of Naples - Italy

EMSS_63: A physics simulation tool for the container loading problem
António G. Ramos, João Jacob, Jorge Justo, José F. Oliveira, Rui Rodrigues, António Miguel Gomes
University of Porto - Portugal

Wednesday 2014-09-10 16:00-17:30
Room: Patio
EMSS: Discrete and Combined Simulation - Session I
Chair(s): Gasper Music, University of Ljubljana; Thomas Wiedemann, HTW Dresden FB Informatik

EMSS_101: Speedsim.net - an open.net based simulation system
Thomas Wiedemann, Karsten Wendt
University of Applied Science Dresden; DUALIS GmbH - Germany

EMSS_52: Event-oriented control functions for enhancing development process of war-game simulators
Se Jung Kwon, Changbeom Choi, Tag Gon Kim
KAIST - Korea

EMSS_75: Train movement dynamics within AnyLogic tool
Roman Divis, Antonin Kavicka
University of Pardubice - Czech Republic

EMSS_80: Design and development of a distributed earthmoving simulation
Duanshun Li, Cristian Petre, Cayce Kerr, Tim Joseph, Simaan AbouRizk, Yasser Mohamed
University of Alberta - Canada

Wednesday 2014-09-10 16:00-17:30
Room: Amphithéâtre J.P. DOM IMS
HMS: Intermodal transportation systems and services - Session I
Chair(s): Manfred Gronalt, University of Natural Resources and Applied Life Sciences

HMS_19: Analyzing the practical use of load planning models in intermodal rail transport
Hilde Heggen, Kris Braekers, An Caris
Hasselt University; Research Foundation Flanders - Belgium

HMS_37: Mode choice modelling for the assessment of an international railway corridor
Diego Crespo Pereira, Rosa Rios Prado, Oscar De Gregorio Vicente
University of A Coruña; Consultrans S.A. - Spain

HMS_40: Risk analysis for supply chain networks
Johannes Göllner, Andreas Peer, Manfred Gronalt, Gerald Quirchmayr
 University of Vienna - Austria

HMS_41: Improving rail road terminal operations in the forest wood supply chain – A simulation based approach
Karl Etlinger, Peter Rauch, Manfred Gronalt
 University of Vienna - Austria

HMS_35: Multimodal freight transportation: a service optimization algorithm
Rosa Rios Prado, Diego Crespo Pereira, Alejandro García del Valle
Universidade da Coruña - Spain

Wednesday 2014-09-10 16:00-17:30
Room: Salle de conférences IMS
I3M 2015 Special Session
Chairs: Yuri Merkuryev, Riga Technical University; Francesco Longo, University of Calabria

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Thursday 2014-09-11 9:00-10:30
Room: Auditorium de l'Agora

EMSS: Indsutrial Processes and Engineering Modeling & Simulation - Session I
Chair(s):Alfredo Garro, University of Calabria

EMSS_70: Mapping of wireless technologies to support real time location systems for tracking resources of large enterprises
Larissa P.M. Cruz, Luiz Landau, Gerson Gomes Cunha, Maria Célia S. Lopes
Federal University of Rio de Janeiro – LAMCE/COPPE - Brazil

EMSS_79: Predicting equipment availability using a high level architecture framework
 Estacio Siemann Santos Pereira, Yasser Mohamed, Simaan AbouRizk
University of Alberta - Canada

EMSS_28: Modelling and simulation of the non-ideal mixing behaviour of the crystallization stage in a sugar factory batch crystallizer
David Tejerina, Rogelio Mazaeda, César de Prada
 University of Valladolid - Spain

EMSS_58: Hierarchical approach to developing a logistic discrete event simulation model using automated guided vehicles
Pavel Raska, Zdenek Ulrych
University of West Bohemia - Czech Republic

EMSS_92: ProOpter: production dynamics analysis and optimization tool
Gasper Music, Miha Glavan, Dejan Gradisar, Stanko Strmcnik
University of Ljubljana - Slovenia

Thursday 2014-09-11 9:00-10:30

Room: Badiene

EMSS: Distributed and Parallel Simulation - Session I
Chair(s): Gasper Music, University of Ljubljana; Thomas Wiedemann, HTW Dresden FB Informatik

EMSS_25: Approach class library of high level parallel compositions to implements communication patterns using structured parallel programming
Mario Rossainz-López, Manuel I. Capel-Tuñón
Universidad Autónoma de Puebla; Universidad de Granada - Mexico/ Spain

EMSS_27: High level architecture virtual assistant framework
Josef Brozek, Bhakti Stephan Onggo, Antonin Kavicka
University of Pardubice; University of Lancaster - Czech Republic/ UK

EMSS_77: Non HLA distributed simulation infrastructure
Jan Voracek, Jiri Penzes, Antonin Kavicka
University of Pardubice - Czech Republic

EMSS_83: WebRTC technology as a solution for web-based distributed simulation
Stepan Kartak, Antonin Kavicka
University of Pardubice - Czech Republic

EMSS_100: Using tablets in distributed simulation
Josef Brozek, Martin Jakes, Lumir Gago
University of Pardubice - Czech Republic

Thursday 2014-09-11 9:00-10:30
Room: Patio

HMS: Ports and Terminals Modelling - Session I
Chair(s): Branislav Dragović, University of Montenegro; Nenad Zrnić, University of Belgrade; Nam Kyu Park, Tongmyong University

HMS_24: Network DEA approach to assessing the efficiency of ships processing at a container terminal
Sebastián Lozano, Gabriel Villa, Víctor Quesada
University of Seville; University of Cartagena - Spain/ Colombia

HMS_7: The use of constructive simulation to teach port management
Mariusz Balaban, Sara Russell, Thomas W. Mastaglio, Paulette Dykes
Old Dominion University - USA

HMS_10: A study on the optimal configuration of berths using simulation model-based on the wharf in Gwangyang port
Nam Kyu Park, Jung Hun Lee
Tongmyong University - Korea

HMS_15: Maritime traffic co-simulation for analyses of maritime systems
Christoph Dibbern, Axel Hahn
University of Oldenburg - Germany

Thursday 2014-09-11 9:00-10:30
Room: Amphithéâtre J.P. DOM IMS

DHSS-MAS-HMS Defense and Homeland Security Simulation - Session I
Chair(s): Agostino Bruzzone, University of Genoa

HMS_47: Data Fusion and simulation aas decision support system in naval operations
Agostino G. Bruzzone, Massimiliano Corso, Francesco Longo, Marina Massei, Alberto Tremori
University of Genoa; Simulation Team; University of Calabria; NATO STO CMRE - Italy

DHSS_5: Collaborative modeling, simulation and visualization framework for airport emergency
Shafagh Jafer
University in Daytona Beach - Florida

DHSS_9: Modelling interdependent urban networks in planning and operation scenarios
Giuseppe Alonge, Ester Ciancamerla, Marco Fallone, Alberto Mastrilli, Michele Minichino, Marco Ranno,
Maurizio Reali, Pasquale Regina
ENEA; COGIP - Italy

MAS_42: Managing cyber security resources via simulation-based optimization
Pasquale Legato, Rina Mary Mazza
University of Calabria - Italy

DHSS_3: Generic motor for simulation analysis
Didier Rau
DGA Information Superiority
Optronic Warfare Department - France

Thursday 2014-09-11 10:30-11:00

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Thursday 2014-09-11 11:00-12:30
Room: Auditorium de l'Agora

EMSS: Indsutrial Processes and Engineering Modeling & Simulation - Session II
Chair(s): Emilio Jimenez, La Rijoia University

EMSS_106: A friday 13th risk model for failure in cross - flow membrane filtration of passion fruit juice
Wei Zou, Kenneth Davey
University of Adelaide - Australia

EMSS_107: A Novel friday 13th risk analysis of a global food process – application to pasteurization of
raw milk containing mycobacterium avium paratubercolusis
Kenneth R. Davey, Saravanan Chandrakash, Brian K. O'Neill
University of Adelaide - Australia

EMSS_108: A new transient predictive model to quantify taint as either geosmin (GSM) or 2-
methylisoborneol (MIB) in rainbow trout (Oncorhynchus Mykiss) farmed in recirculating aquaculture
systems (RAS)
Kenneth R. Davey, Priyantha I. Hathurusingha
University of Adelaide - Australia

EMSS_132: Production of compost for mushroom cultivation: a life cycle assessment study
Francisco J. Leiva-Lázaro, Julio Blanco-Fernández, Eduardo Martínez-Cámara, Emilio Jiménez-Macías
University of La Rioja - Spain

EMSS_23: Modeling and performance analysis of ammonia-water absorption refrigeration system for

Li Ren, Zijian Guo, Hongxia Li
Dalian Ocean University - China

Thursday 2014-09-11 11:00-12:30
Room: Badiene
MAS: Production Systems Design - Session I
Chair(s): David del Rio Vilas, Proyfe Group

MAS_3: Using lean principles & simulation for productivity improvement: the case of a ceramic industry
Tiago Silva, Ana Luísa Ramos, José Vasconcelos Ferreira
University of Aveiro - Portugal

MAS_38: Integration of simulation data for construction project planning using a process-based simulation framework
Ali Ismail, Raimar Scherer
Technische Universität Dresden - Germany

MAS_16: Analysing and optimising a dual resource constraint production system using simulation
Katrien Ramaekers, Hanne Pollaris, Lien Claes
Hasselt University - Belgium

MAS_10: Application of evolutionary algorithms for bakery production scheduling
Florian T. Hecker, Bernd Hitzmann
University of Hohenheim - Germany

MAS_17: Evaluating the influence of virtual reality based training on worker's competences in the mining industry.
Shiva Pedram, Pascal Perez, Stephen Palmisano
University of Wollongong - Australia

Thursday 2014-09-11 11:00-12:30
Room: Patio
HMS: Ports and Terminals Modelling - Session II
Chair(s): Branislav Dragović, University of Montenegro; Nenad Zrnić, University of Belgrade; Nam Kyu Park, Tongmyong University

HMS_46: Training in car terminals: a modular architecture based on distributed and interoperable simulation
Francesco Longo, Francesco De Bonis, Francisco Spadafora, Letizia Nicoletti
University of Calabria; Ico-BLG; Cal-Tek Srl - Italy

HMS_2: Simulation model of yard truck double cycling to improve container terminal productivity
Essmeil Ahmed, Tarek Zayed
 Concordia University - Canada

HMS_34: Variable neighborhood search for the block relocation problem
Shunji Tanaka
Kyoto University - Japan

HMS_18: Route cost evaluation model of container shipping focused on North China ports and Busan port
Nam Kyu Park, Sang Kook Park

Tongmyong University; Hanwha S&C - Korea

Thursday 2014-09-11 11:00-12:30
Room: Amphithéâtre J.P. DOM IMS
IWISH: Modeling & Simulation in Healthcare - Session I
Chair(s): Marco Frascio, University of Genoa

IWISH_5: Validation of a 4D low cost Laparoscopic training Platform
Marco Sguanci, Francesca Mandolfino, Michele Minuto, Giovanni Vercelli, Marco Gaudina, Valerio Rumolo, Marco Frascio
University of Genova - Italy

IWISH_7: Automated domain specific feature selection for classification based segmentation of tomographic medical image data
 Gerald Zwettler, Werner Backfrieder
 University of Applied Sciences Upper Austria; University of Vienna - Austria

IWISH_8: Robust surface based registration in an open framework for image guided surgery
 Werner Backfrieder, Gerald Zwettler
University of Applied Sciences Upper Austria - Austria

IWISH_9: A computational comparison between linear and pulsed Extracorporeal Membrane Oxygenation (ECMO) based on Hemodynamics in the Aorta
Vera Gramigna, Maria Vittoria Caruso, Attilio Renzulli, Gionata Fragomeni
"Magna Graecia" University - Italy

IWISH_10: Design and model a novel ankle foot orthosis
 Trung Nguyen, Takashi Komeda, Hung Dao
Shibaura Institute of Technology - Japan

Thursday 2014-09-11 11:00-12:30
Room: Salle de conférences IMS
SIMCJOH Project - Special Session
Chair(s): Agostino G. Bruzzone, University of Genoa

Thursday 2014-09-11 12:30-14:00
LUNCH Co-Sponsored by Lio-Tech, CAL-TEK, MAST, SIM4FUTURE

Thursday 2014-09-11 14:00-15:30
Room: Auditorium de l'Agora

EMSS: Indsutrial Processes and Engineering Modeling & Simulation - Session III
Chair(s): Juan Ignacio Latorre, La Rijoia University

EMSS_96: Production line modeling and balancing: comparison of existing techniques and proposal of a new methodology
Alessandro Silvestri, Cristina Cerbaso, GianPaolo Di Bona, Antonio Forcina, Vincenzo Duraccio
Niccolò Cusano University - Italy

EMSS_97: Maintenance critical analysis and priority index: a new model for maintenance policy
Alessandro Silvestri, Cristina Cerbaso, Domenico Falcone, Antonio Forcina, Vincenzo Duraccio

Niccolò Cusano University - Italy

EMSS_126: Evaluation of the erosive wear of the AA 6082 T6 alloy treated with friction stir Ppocessing (FSP)
E. Martínez-Cámara, J. Blanco-Fernández, Y.P. Chacón, A. Sanchez-Roca, H. Carvajal-Fals
University of La Rioja; University of Oriente - Spain/ Cuba

EMSS_29: Modeling of lattice thermal expansion for simulation of thermal stress in 3D nano mosfets
Abderrazzak El Boukili
University in Ifrane - Marocco

EMSS_73: FEM analysis of radial-axial profile ring rolling process
Zhengkun Feng, Henri Champliaud
Ecole de technologie superieure - Canada

Thursday 2014-09-11 14:00-15:30
Room: Badiene
MAS: Simulation Based Design - Session I
Chair(s): Yilin Huang , Delft University of Technology

MAS_21: Simulation approach for aircraft spare engines & engine parts planning
Jose Ramirez-Hernandez, Steven Oakley, Mei Zhang, Alejandro Scalise
American Airlines - USA

MAS_9: Modeling and simulation for the performance evaluation of the on-board communication system of a metro train
Alberto Falcone, Alfredo Garro, Andrea Tundis
University of Calabria - Italy

MAS_11: Neuronal control strategies of neuronal controls for AC-DC converter with power factor correction
Rijah Rajaonah, Solofanja Rajonirina, Nirnarison Jean Razafinjala
University of Antsiranana - Madagascar

MAS_25: A systems theoretical perspective on data-driven modeling and simulation
Yilin Huang, Mamadou Seck, Alexander Verbraeck
Delft University of Technology; Old Dominion University - Netherlands/ USA

MAS_28: Simulation of hot spots generation process on separator disc in multi-disc clutch
Cenbo Xiong, Heyan Li, Song He, Biao Ma, Qingdong Yan, Hongcai Li, Huiyu Xu, Jianwen Chen
Beijing Institute of Technology; JiangLu Machinery & Electronics Group Co - China

Thursday 2014-09-11 14:00-15:30
Room: Patio
HMS: Planning Sustainable Transport Systems - Session I
Chair(s): Miguel Angel Piera

HMS_42: Intelligent transportation system to enhance the sustainability of the air freight transport
Miquel Angel Piera, Xavier Leal, Lorenzo Castelli, Dace Aizstrauta
 Universitat Autònoma de Barcelona; University of Trieste; Vidzeme University - Spain/ Italy/ Latvia

HMS_43: Development of intelligent transportation system implementation impact evaluation methodology: case-study of Riga

Irina Yatskiv, Mihails Savrasovs, Katerina Alfimova
Transport and Telecommunication Institute, - Latvia

HMS_45: Passenger slot assignment for airport's security screening
Jenaro Nosedal-Sánchez, Miquel A. Piera-Eroles, Rubén Martínez, Núria Alsina-Pujol
Universitat Autònoma de Barcelona; Advanced Logistics Group - Spain

HMS_6: Investigation of economic stability of logistic process using statistical dynamic modelling
Vladimirs Jansons, Vitalijs Jurenoks, Konstantins Didenko
Riha University - Latvia

HMS_12: Simulating boarding strategies for minimising passenger aircraft turn-times
Luis Cadarso, Nuria Perelló, Angel A. Juan, Javier Faulin
Rey Juan Carlos University; Autonomous University of Barcelona; Open University of Catalonia; Public University of Navarre - Spain

Thursday 2014-09-11 14:00-15:30
Room: Amphithéâtre J.P. DOM IMS
IWISH-MAS: Modeling & Simulation in Healthcare - Session II
Chair(s): Marco Frascio, University of Genoa

IWISH_12: Lean management approaches applied to healthcare systems
Francesco Longo, Antonio Calogero, Letizia Nicoletti, Marina Massei, Fabio De Felice, Antonella Petrillo
University of Calabria; Cal-Tek Srl; University of Genoa; University of Cassino - Italy

IWISH_4: A lifetime Individual Sampling Model (ISM) for heroin use and treatment evaluation in Australia
 Nagesh Shukla, Van Hoang, Marian Shahanan, Alison Ritter, Vu Lam Cao, Pascal Perez
 University of New South Wales - Australia

IWISH_6: Verification concept for an electroneurogram based prosthesis control
 Volkhard Klinger
FHDW Hannover - Germany

MAS_39: Agent-based modelling to analyse the impact of work status on childbirth: a case study of korea
Mazhar Sajjad, Chang Won Ahn
University of Science and Technology; Electronics and Telecommunication Research Institute - Korea

IWISH_2: Building the digital patient: considerations for the next decade
 C. Donald Combs
Eastern Virginia Medical School - USA

Thursday 2014-09-11 14:00-15:30
Room: Salle de conférences IMS
SEE (Smackdown) Initiative - Special Session
Chair(s): Agostino G. Bruzzone, University of Genoa

Thursday 2014-09-11 15:30-16:00

COFFEE BREAK Co-Sponsored by CAL-TEK, LIO Tech, MAST, SIM4FUTURE

Thursday 2014-09-11 16:00-17:30
Room: Auditorium de l'Agora
EMSS: Workshop on Model Engineering - Session I
Chair(s): Prof. Lin Zhang, Beihang University, Prof. Bernard P. Zeigler, RTSync Corp, Dr. Saurabh Mittal, Dunip Technologies

EMSS_117: A conjecture from learning simulations of series and parallel connections of components
Alexandre Muzy, Bernard P. Zeigler
I3S UMR CNRS; RTSync Corp. and Arizona Center for Integrative Modeling and Simulation, - France, USA

EMSS_122: DEVS models design and test using AGILE-based methods with DEVSimPy
Timothée Ville, Laurent Capocchi, Jean-Francois Santucci
University of Corsica - France

EMSS_134: Model engineering for cyber complex adaptive systems
Saurabh Mittal
Dunip Technologies LLC - USA

EMSS_5: The model engineering for complex system simulation
Lin Zhang, Yuewei Shen, Xuesong Zhang, Xiao Song, Fei Tao, Ying Liu
Beihang University - China

EMSS_84: Combining DEVS and model-checking: using systems morphisms for integrating simulation and analysis in model engineering
Bernard P. Zeigler, James J. Nutaro
RTSync Corp; Arizona Center for Integrative Modeling and Simulation; b OakRidge National Laboratory - USA

Thursday 2014-09-11 16:00-17:30
Room: Badiene
EMSS-IWISH: Modeling & Simulation in Healthcare - Session III
Chair(s). Marco Frascio, University of Genoa

EMSS_68: Analysis of obesity modelling
Maja Atanasijevic Kunc, Tina Sentocnik, Jože Drinovec
University of Ljubljana; University of Maribor - Slovenia

EMSS_110: A simple queue model for an appointment system and applications in a hospital CT scan facility
Francesco Boenzi
University of Bari - Italy

EMSS_34: Probabilistic behavioral model for the detection of criticalities when using morphine and fentanyl PCA
Henrikas Pranevicius, Mindaugas Snipas, Tadas Kraujalis, Mindaugas Pranevicius, Osvaldas Pranevicius, Vytautas Pilkauskas
University of Technology Lithuania; Albert Einstein College of Medicine; New York Hospital - Lithuania/ USA

IWISH_11: FMECA modelling and analysis in blood transfusion chain
Gianluca Borelli, Francesco Valentino Caredda, Alessandro Fanti, Gianluca Gatto, Giuseppe Mazzarella, Pier Francesco Orrù, Andrea Volpi, Francesco Zedda
Azienda Ospedaliera G. Brotzu; University of Cagliari; University of Parma - Italy

Thursday 2014-09-11 16:00-17:30
Room: Patio

HMS: Simulation Metamodelling and Optimisation in Logistics and Supply Chains - Session I
Chair(s): Galina Merkuryeva, Riga Technical University

HMS_17: A dynamic model and an algorithm for supply chain scheduling problem solving
Dmitry A. Ivanov, Boris V. Sokolov, Semyon A. Potryasaev
Berlin School of Economics and Law; Saint Petersburg State University - Germany/ Russia

HMS_44: Simulation-based fitness landscape analysis and optimisation of complex systems
Vitaly Bolshakov
Riga Technical University - Latvia

HMS_8: Reconfiguration model for production-inventory-transportation planning in a supply network
Dmitry A. Ivanov, Boris V. Sokolov, Alexander N. Pavlov
Berlin School of Economics and Law; Saint Petersburg State University - Germany/ Russia

HMS_13: Conceptual model of supply chain node for simulation based risk analysis
Peter Mensah, Yuri Merkuryev, Jelena Pecherska
Riga Technical University - Latvia

HMS_22: Direct modeling of queuing systems and networks
Yury L. Ryzhikov, Vyacheslav A. Zelentsov, Semyon A. Potryasaev
Saint Petersburg University - Russia

Thursday 2014-09-11 16:00-17:30
Room: Amphithéâtre J.P. DOM IMS

SESDE: Simulation pro Energy and Environment - Session II
Chair(s): Gregory Zacharewicz, University of Bordeaux

SESDE_69: Simulation of an isolated wind hydro system
Rafael Sebastián, Jerónimo Quesada
Spanish University for Distance Education; University of the Basque Country - Spain

SESDE_88: Influence of probabilistic wind forecast accuracy in the operative management of renewable energy systems with storage
Cristina Azcárate, Fermín Mallor, Rosa Blanco
Public University of Navarre - Spain

SESDE_143: A decision model to increase security in a utility network
Jochen Janssens, Luca Talarico, Kenneth Sörensen
University of Antwerp - Belgium

SESDE_144: A rigorous approach for smart grid systems engineering using co-simulation
Brett Bicknell, Karim Kanso, Jose Reis, Neil Rampton, Daniel McLeod
Critical Software Technologies; Selex ES - UK

SESDE_145: Technical concept of a software component for social sustainability in a software for sustainability simulation of manufacturing companies
Andi Widok, Volker Wohlgemuth

HTW Berlin; University of Hamburg - Germany

Thursday 2014-09-11 16:00-17:30
Room: Salle de conférences IMS
MISS-MSNET: Workshop: New Universities Cooperation Agreements
Chair(s): Francesco Longo, Universities of Calabria; Gianpiero Barbuto, University of Calabria

Social Event

Thursday 2014-09-11 18:30-23:00
19:00 I3M Gala Dinner @ Château Smith Haut Lafitte 33650 BORDEAUX (Bus Departing at 18.30 from Agora Multi-Purpose Complex)

During Gala Dinner the I3M Best Paper Awards will be presented

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Friday 2014-09-12 9:00-10:30
Room: Auditorium de l'Agora
EMSS: Workshop on Soft Computing and Modelling & Simulation - Session I
Chair(s): Michael Affenzeller, Upper Austrian University of Applied Sciences; Witold Jacak, Upper Austrian University of Applied Sciences

EMSS_26: Data based identification of short term predictors for stock market trends using heterogeneous model ensembles
Stephan Winkler, Bonifacio Castaño, Sergio Luengo, Susanne Schaller, Gabriel Kronberger, Michael Affenzeller
University of Applied Sciences Upper Austria; University of Alcalá; University of Linz - Austria/ Spain

EMSS_31: Identification of endothelial cell morphology in cornea using evolution strategies
 Lisa Obritzberger, Susanne Schaller, Viktoria Dorfer, Claudia Loimayr, Simone Hennerbichler, Stephan Winkler
University of Applied Sciences Upper Austria; Red Cross Blood Transfusion Service - Austria

EMSS_33: Hierarchical feature selection for biological data
Witold Jacak, Karin Pröll
Austrian University of Hagenberg - Austria

EMSS_48: Mathematical modeling of the diversity in human B and T cell receptors using machine learning
Susanne Schaller, Johannes Weinberger, Martin Danzer, Christian Gabriel, Rainer Oberbauer, Stephan M. Winkler
University of Applied Sciences Upper Austria; Red Cross Transfusion Service; Elisabethinen Hospital - Austria

EMSS_95: Integrated simulation and optimization in HeuristicLab
Andreas Beham, Gabriel Kronberger, Johannes Karder, Michael Kommenda, Andreas Scheibenpflug, Stefan Wagner, Michael Affenzeller
University of Applied Sciences Upper Austria; University Linz - Austria

Friday 2014-09-12 9:00-10:30
Room: Badiene

EMSS: Modelling and Simulation Approaches in and for Education - Session I

Chair(s): Maja Atanasijevic-Kunc, Univ. Ljubljana; Andreas Körner, Vienna Univ. of Technology

EMSS_135: Serious game at increased impact on culture and tourism
Francesco Longo, Letizia Nicoletti, Stefano Vena, Antonio Padovano
University of Calabria; Cal-Tek Srk - Italy

EMSS_21 : Teaching variance reduction in matlab
Jaroslav Sklenar
University Of Malta - Malta

EMSS_24: Table top for scheduling and controlling constructions course
Caroline Cavalheiro, Ailton Soares Freire, Antônio Edesio Jungles
Universidade Federal de Santa Catarina - Brazil

EMSS_35: Modeling of mechatronic systems in Matlab (Simulink / Simmechanics)
Irina Kalapyshina, Anna D. Perechesova, Konstantin A. Nuzhdin, Victor M. Musalimov, Georgiy B. Zamoruev
Saint Petersburg National Research University of Information Technologies, Mechanics and Optics (ITMO University) - Russia

EMSS_109: A modified beer game for simulation and optimization teaching
Diego Crespo-Pereira, Adolfo Lamas-Rodriguez, Rosa Rios Prado
University of A Coruña - Spain

Friday 2014-09-12 9:00-10:30
Room: Patio

HMS: Modeling & Simulation in Logistics, Traffic and Transportation - Session I
Chair(s): Yuri Merkuryev, Riga Technical University

HMS_11: "What to" approach for the optimization of a logistics platform
Domenico Gattuso, Gian Carla Cassone, Domenica Savia Pellicanò,
Mediterranea University - Italy

HMS_27: Cost management in car terminals
Raffaele Iannone,Salvatore Miranda, Leandro Prisco, Stefano Riemma, Debora Sarno
University of Salerno - Italy

HMS_29: Reverse logistics simulation modelling
Ivona Bajor, Darko Babic, Petr Prusa
University of Zagreb; University of Pardubice - Croatia/ Czech Republic

HMS_4: Modeling transportation operations in the supply chains based on JIT model
Valery Lukinskiy, Vladislav Lukinskiy, Yuri Merkuryev
University of St. Petersburg - Russia

Friday 2014-09-12 9:00-10:30
Room: Amphithéâtre J.P. DOM IMS

DHSS-MAS: Defense and Homeland Security Simulation - Session II
Chair(s): Agostino Bruzzone, University of Genoa

DHSS_11: Interoperability requirements for developing simulation solutions for innovative integrated systems
Agostino G. Bruzzone, Marina Massei, Christian Bartolucci, Simonluca Poggi, Antonio Martella, Giulio Franzinetti
University of Genoa; Simulation Team - Italy

DHSS_10: Modelling of social Influence with DEVS and CELL DEVS formalism
Youssef Bouanan, Gregory Zacharewicz, Bruno Vallespir
University of Bordeaux - France

DHSS_4: Small arms training simulators in the New Zealand defence force
Mark Anderson
Defence Technology Agency
New Zealand Defence Force - New Zeland

DHSS_7: Design of a collaborative platform for supporting crisis management
Julien Castet, Jean Baptiste de la Rivière, Maaike Schaap, Emilie van der Spil, Werner Overdijk
Immersion SAS; Crisisplan - France/ Nederland

DHSS_8: Understanding security policies in the cyber warfare domain through system dynamics
Stefano Armenia, Alessandro Cardazzone, Camillo Carlini
Sapienza University of Rome - Italy

Friday 2014-09-12 10:30-11:00

COFFEE BREAK Co-Sponsored by CAL-TEK, LIO Tech, MAST, SIM4FUTURE

Friday 2014-09-12 11:00-12:30
Room: Auditorium de l'Agora

EMSS: Workshop on Soft Computing and Modelling & Simulation - Session II
Chair(s): Michael Affenzeller, Upper Austrian University of Applied Sciences; Witold Jacak, Upper Austrian University of Applied Sciences

EMSS_93: Evolutionary algorithms for hyperparameter tuning on neural networks models
David Orive, Gorka Sorrosal, Cruz E. Borges, Cristina Martin, Ainhoa Alonso-Vicario
University of Deusto - Spain

EMSS_105: Modeling and optimization of the extraction of lignosulfonate from barley straw by using artificial neural networks
Maria Guadalupe Serna-Diaz, Joselito Medina-Marin, Ainhoa Arana-Cuena, Juan Carlos Seck-Tuoh-Mora, Alejandro Tellez-Jurado, Yuridia Mercado-Flores, Angelica Jimenez-Gonzalez, Norberto Hernandez-Romero
Polytechnic University of Pachuca; Autonomous University of Hidalgo State - Mexico

EMSS_99: Simulation based analysis and development of decision support system for virtual network bandwidth management
Julija Asmuss, Gunars Lauks
Riga Technical University - Latvia

EMSS_74: Searching and indexing distorted data collections

Tomas Kocyan, Jan Martinovic, Michal Podhoranyi
Technical University of Ostrava - Czech Republic

EMSS_72: A multimodal optimization method for simulation systems
Zhizhao Liu, Wei Li, Ming Yang
Harbin Institute of Technology - China

Friday 2014-09-12 11:00-12:30
Room: Badiene
EMSS: Modeling & Simulation Methodologies, Techniques and Applications - Session I
Chair(s): Juan Ignacio Latorre, Public University of Navarre

EMSS_51: Empirical modeling and simulation for discharge dynamics enabling catchment-scale water quality management
Huma Zia, Nick R. Harris, Geoff V. Merrett
University of Southampton - UK

EMSS_111: Simulation and experimental analysis of led weatherproof luminaire thermal performance
Carlos Javierre, Daniel Elduque, Víctor Camañes, David Franch
University of Zaragoza; Zalux - Spain

EMSS_125: Tool profiles evaluation based on vibroacoustical signals generated by friction-stir welding
Julio Blanco-Fernández, Emilio Jiménez-Macías, Mario Sanchez-Orozco, Angel Sanchez-Roca, Hipolito Carvajal-Fals
University of La Rioja; University of Oriente - Spain/ Cuba

EMSS_133: Modeling of alternative for in situ unidirectional slabs
Esteban Fraile-García, Javier Ferreiro-Cabello, Eduardo Martínez-Cámara
University of La Rioja; Qualiberica SL - Spain

EMSS_65: GPRS network monitoring of solar energy generation and supply in rural residences
Robson da Cunha Santos, Gerson Gomes da Cunha, Marcos Antônio Cruz Moreira, Mônica Castelo Branco, David Douglas Nunes Oliveira, Matheus Muzitano Reis
Fluminense Federal Institute; Estácio de Sá University; Federal University of Rio de Janeiro - Brazil

Friday 2014-09-12 11:00-12:30
Room: Patio

HMS: Modeling & Simulation in Logistics, Traffic and Transportation - Session II
Chair(s): Yuri Merkuryev, Riga Technical University

HMS_16: Simulation and optimization of a capillar third generation car sharing system
Elvezia Cepolina, Alessandro Farina
University of Pisa - Italy

HMS_25: Manoeuvring simulations of the personal vehicle PICAV
Elvezia Maria Cepolina, Francesco Cepolina
University of Pisa; University of Genoa - Italy

HMS_31: A robotic vehicle for freight delivery in urban areas
Rezia Molfino, Matteo Zoppi, Aiko Dinale, Giovanni Gerardo Muscolo

University of Genova; Humanot - Italy

HMS_28: Space optimization in warehouses logistics
Francesco Cepolina, Elvezia Maria Cepolina
University of Genoa; University of Pisa - Italy

HMS_36: A combined simulation approach for the effective integration of operational and strategic levels for intermodal transport modelling
Anton Cotelo Garcia, Diego Crespo Pereira, Rosa Rios Prado, David del Rio Vilas
Proyfe Group; University of A Coruña - Spain

Friday 2014-09-12 11:00-12:30
Room: Amphithéâtre J.P. DOM IMS
SESDE: SustainableTransportation - Session I
Chair(s): Arnis Lektauers, Riga Technical University;   Luis Le Moyne, University of Bourgogne, France

SESDE_70: Numerical investigation of boundary layer detachment by active flow control
Karunakaran Hemrijicks, Tonino Sophy, Julien Jouanguy, Arthur Da Silva, Luis Le Moyne
 Institute of Automotive and Transport Engineering - France

SESDE_71: Automatic grid generation from a numerical picture for transient flow simulation over a car shape obstacle
Tonino Sophy, Julien Jouanguy, Luis Le Moyne
 Institute of Automotive and Transport Engineering - France

SESDE_87: Adaption of multi-physics PEM fuel cell model using sensitivity analysis
Raaj Ganesh Samikannu Ramesh, El-Hassane Aglzim, Daniela Chrenko, Luis Le Moyne
University of Burgundy - France

SESDE_141: DEVS based interactive geosimulation framework for public transport analysis and planning
Arnis Lektauers, Yuri Merkuryev
Riga Technical University - Latvia

Friday 2014-09-12 11:00-12:30
Room: Salle de conférences IMS
DIEM-SSP and SGICT Projects- Special Session
Chair(s): Agostino G. Bruzzone, University of Genoa; Francesco Longo, University of Calabria

Friday 2014-09-12 12:30-14:00
LUNCH Co-Sponsored by Lio-Tech, CAL-TEK, MAST, SIM4FUTURE

Friday 2014-09-12 14:00-15:30
Room: Auditorium de l'Agora
EMSS: Petri Nets Based on Modeling & Simulation - Session I
Chair(s): Emilio Jiménez, University of La Rioja

EMSS_103: Applying an adaptive petri net to calculate the makespan in the job shop scheduling problem
Joselito Medina-Marin, Juan Carlos Seck-Tuoh- Mora, Norberto Hernandez-Romero, Nayeli Jazmin Escamilla-Serna

Autonomous University of Hidalgo State - Mexico

EMSS_127: Design and operation of a dairy plant by means of a decision support tool based on the Petri nets paradigm
Juan Ignacio Latorre-Biel, Emilio Jiménez-Macías, Julio Blanco-Fernández, Eduardo Martínez-Cámara, Juan Carlos Sánez-Díez, Mercedes Pérez-Parte
University of La Rioja - Spain

EMSS_128: Mixing formalisms based on Petri nets for improving the efficiency of modelling and simulation of DES
Juan Ignacio Latorre-Biel, Mercedes Pérez-Parte, Juan Carlos Sáenz-Díez, Jorge L. García-Alcaraz, Emilio Jiménez-Macías
University of La Rioja; Autonomous University of Ciudad Juarez - Spain

EMSS_129: Disjunctive coloured Petri nets: a formalism for improving the applicability of CPN to the modeling of DES with alternative structural configurations
Juan Ignacio Latorre-Biel, Mercedes Pérez-Parte M, Emilio Jiménez-Macías
University of La Rioja - Spain

Friday 2014-09-12 14:00-15:30
Room: Badiene
EMSS: Modeling & Simulation Methodologies, Techniques and Applications - Session II
Chair(s): Juan Ignacio Latorre, Public University of Navarre

EMSS_49: A multi task assignment method in cloud-based simulation
Lei Ren, Hejian Ou, Jin Cui, Bowen Li, Baocun Hou
Beihang University; High-Tech Research and Development Center; Beijing Simulation Center - China

EMSS_76: Self-optimizing real-time recommendation model design based on YARN
Tao Liu, Shuang Wang, Peng Wu
Wuhan University of Technology - China

EMSS_86: Migration among simulation paradigms and tools
Mairita Zake, Egils Ginters
University of Applied Sciences - Latvia

EMSS_89: Feedback DTC-SVM based a fractional PI controller: applied to rotor's speed of induction motor
Youcef Zennir, Lakhdar Bouras
University of Skikda - Algeria

EMSS_38: Kinematics and dynamics analysis of different mechanisms using simmechanics / simulink / matlab
Anna D. Perechesova, Irina I. Kalapyshina, Konstantin A. Nuzhdin
Saint Petersburg National Research University of Information Technologies, Mechanics and Optics (ITMO University) - Russia

Friday 2014-09-12 14:00-15:30
Room: Patio
HMS-MAS: Modeling & Applied Simulation - Session I
Chair(s): Adriano Solis, York University

MAS_41: Approximate and exact corrections of the bias in Croston's method when forecasting lumpy demand: empirical evaluation
Adriano Solis, Francesco Longo, Somnath Mukhopadhyay, Letizia Nicoletti, Vittoria Brasacchio
York University; University of Calabria; University of Texas at El Paso - Canada/ Italy/ USA

MAS_5: Supervised growth network SGWRN model can achieve a balanced control of two-wheeled robot
Fu-jin Li, Mei-jie Huo, Hong-ge Ren, Dong-mei Fei
He bei United University - China

MAS_26: One approach of adequate mathematical description construction
Yuri Menshikov
Dnepropetrovsk University - Ukraine

MAS_36: Simulate enterprise conceptual models execution by coupling enterprise services and DEVS models using workflow
Hassan Bazoun, Judicael Ribault, Gregory Zacharewicz, Yves Ducq, Hadrien Boyé
University of Bordeaux; Hardis / Hardis Conseil - France

HMS_32: System Identification modeling of rotors behaviour
Giovanni Gerardo Muscolo, Rezia Molfino
Humanot; University of Genova - Italy

Friday 2014-09-12 14:00-15:30
Room: Amphithéâtre J.P. DOM IMS
MAS-DHSS: Workshop on Serious Games and Simulation applied to Security, Crisis Management and Safety - Session I
Chair(s): Alessandra Tesei, NATO STO CMRE; Igor Meyer, TU Delft

MAS_31: A seriuos game for testing business continuity plans in a manufacturing firm
Arturo Del Vescovo, Serena Rella, Carmine Vox, Maria Grazia Gnoni, Giorgio Mossa
Bosch Tecnologie Diesel Bari; University of Salento; Polytechnic of Bari - Italy

MAS_40: Multidisciplinary coordination of on scene command teams in virtual emergency exercises
Theo van Ruijven, Igor Mayer, Mark de Bruijne
Delft University of Technology - Netherlands

MAS_20: Modeling and simulation for cascading failure considering an AC flow power grid
Woojin Kim, Chulhan Kim, Hyounglak Jun, Tae-Eog Lee
University in Daejeon - South Korea

MAS_44: Addressing strategic challenges on mega cities through MS2G
Agostino G. Bruzzone, Marina Massei, Matteo Agresta, Simonluca Poggi, Fabio Camponeschi, Marco Camponeschi
University of Genoa; Simulation Team; Dark Energy Srl - Italy

Friday 2014-09-12 15:30-16:00

COFFEE BREAK Co-Sponsored by CAL-TEK, LIO Tech, MAST, SIM4FUTURE

Friday 2014-09-12 16:00-17:30
Room: Auditorium de l'Agora
EMSS: Petri Nets Based on Modeling & Simulation - Session II

Chair(s): Emilio Jiménez, University of La Rioja

EMSS_130: Development af a Petri net model for a reconfigurable intelligent system based on experimental data
Juan Ignacio Latorre, Karim El-Laithy, Martin Bogdan, Emilio Jiménez
University of La Rioja; Leipzig University - Spain/ Germany

EMSS_115: A coloured petri net model for the MAS simulation of urban economics in Yantai
Roman Buil, Miquel Angel Piera, Egils Ginters, Artis Aizstrauts
Universitat Autònoma de Barcelona; University of Applied Sciences - Spain/ Latvia

EMSS_131: Petri net representation with ciphered subnets: definition of PNML extensions for subnets representation and use of XML encryption for ciphering
Iñigo León-Samaniego, Juan-Carlos Sáenz-Díez, Jorge Luis García, Mercedes Pérez-Parte
University of La Rioja; Autonomous University of Ciudad Juarez - Spain

EMSS_123: CPN-simulation methodology for the boarding process of aircraft
Miguel Mujica Mota, Idalia Flores, Daniel Guimarans
Amsterdam University of Applied Sciences; Universidad Nacional Autónoma de México; National ICT Australia - Netherlands/ México/ Australia

Friday 2014-09-12 16:00-17:30
Room: Badiene
EMSS: Modeling & Simulation Methodologies, Techniques and Applications - Session III
Chair(s): Francesco Longo, University of Calabria

EMSS_91: Influence of parked cars on smoke propagation during car park fire
Peter Weisenpacher, Ladislav Halada, Jan Glasa, Jan Astalos
Slovakia - Slovakia

EMSS_98: Towards a metamodel for airport modeling and simulation
Deniz Çetinkaya, Ismet Camci
University of Turkish Aeronautical Association - Turkey

EMSS_114: Visualization techniques for simulation models in virtual reality
Arnis Cirulis, Egils Ginters
Sociotechnical Systems Engineering Institute - Latvia

EMSS_69: Real time interaction and handling tool of historical data on timelapse record for construction management
 Livia Fernandes, Gerson G. Cunha, Celia Lopes, Luiz Landau
Federal University of Rio de Janeiro – LAMCE/COPPE - Brazil

EMSS_55: Simulation as a service in construction
Sean Newstead, Simaan AbouRizk, Stephen Hague, Yasser Mohamed, Junhao Zou
University of Alberta - Canada

Friday 2014-09-12 16:00-17:30
Room: Patio
EMSS-MAS: Modeling & Simulation in Business, Economy, Finance, Commerce, Politics - Session I
Chair(s). Miguel Angel Piera, Autonomous University of Barcelona

EMSS_120: Skopje bicycle inter modality simulator – E-involvement through simulation and ticketing
Egils Ginters, Artis Aizstrauts, Girts Dreija, Maija Ablazevica, Sergey Stepucev, Inita Sakne, Mikelis
Baltruks, Miquel Angel Piera Eroles, Roman Buil, Marjan Gusev, Goran Velkoski
Institute of Vidzeme; Universitat Autònoma de Barcelona; University Sts Cyril and Methodius - Latvia/
Spain/ Macedonia

EMSS_30: The relationship between R&D expenses and performance: evidence from European
manufacturing enterprises
Ondrej Zizlavsky, Michal Karas
Brno University - Czech Republic

EMSS_113: Fupol simulators and advanced visualization framework integration
Egils Ginters, Artis Aizstrauts, Mikelis Baltruks, Kawa Nazemi, Dirk Burkhardt, Peter Sonntagbauer,
Susane Sonntagbaure, Jorge Martin Gutierrez
University of Applied Sciences; Fraunhofer-Institut für Graphische Datenverarbeitung; Cellent AG;
Universidad de La Laguna - Latvia/ Germany/ Austria/ Spain

EMSS_66: Approaching demand of cash transactions at bank branches
Miguel Aguilar Zaragoza, Idalia Flores de la Mota
University of Mexico - Mexico

MAS_27: The defence of bricks and mortar retailing
Roderick Duncan, Terry Bossomaier, Steve d'Alessandro
Charles Sturt University - Australia

Friday 2014-09-12 16:00-17:30
Room: Amphithéâtre J.P. DOM IMS
**MAS-DHSS: Workshop on Serious Games and Simulation applied to Security,
Crisis Management and Safety - Session II**
Chair(s): Alessandra Tesei, NATO STO CMRE; Igor Meyer, TU Delft

Friday 2014-09-12 17:30-18:30
Room: Auditorium de l'Agora
Chair(s): Agostino Bruzzone, University of Genoa
I3M Closing Ceremony

I3M Next Year

Be Ready for I3M in Italy
I3M2015 in Bergeggi, Italy
**If you are interested in being active in I3M2015 in Bergeggi Italy, please visit:
www.msc-les.org/conf/i3m2015
and/or contact the Program Chair Dr.Francesco Longo**

International Journal Special Issues for I3M

The I3M Organization finalized an agreement to publish most interesting I3M papers in International Journals; the following Special Issues will include a collection of best papers submitted and presented at I3M:

-International Journal of Food Engineering
Special Issue on: "Advanced simulation models and techniques for food processing and operations"

-Journal of Simulation
Special Issue on: "New Insights into the Application of Simulation Modeling Multidisciplinary domains including Industry, Logistics, Defense, Healthcare, Energy and Environment"

-International Journal of Simulation and Process Modelling
Special Issue on: "Modeling and Applied Simulation for the 3rd Millennium: Enhancements in traditional Approaches and moving towards Simulation as Service"

-International Journal of Simulation and Process Modelling
Special Issue on: "New Advances in Simulation and Process Modeling: integrating new Technologies and Methodologies to enlarge Simulation Capabilities"

-International Journal of Modeling, Simulation, and Scientific Computing
Special Issue on: "Agent Directed Simulation"

-International Journal of Service and Computing-Oriented Manufacturing
Special Issue on: "upporting Manufacturing Systems and Industrial Processes through Innovative Simulation Models and Advanced Computing"

-International Journal of Privacy and Health Information Management
Special Issue on: "The future of Healthcare: new Methodologies, Technologies and Applications based on Modeling & Simulation"

I3M Best Paper Awards
In the I3M Best Paper Awards will be delivered during I3M at the Gala Dinner; these are assigned by the I3M Best Paper Award International Committee and selected among the top quality papers of each Conference based on their originality, scientific quality and impact on each specific domain.

Gianni Cantice Award for Gifted Simulation Students
The "Gianni Cantice Research Award for Gifted Simulation Students" will be announced during the I3M Opening Ceremony and attributed to the best simulation student applicants; the Award is entitled to Col.Cantice as recognition for his long activity in Simulation; the Gianni Cantice Award Winner will receive the Award Certificate, a financial contribution and the opportunity to spend a period in a M&S Excellence Center world wide, as visiting researcher of the Simulation Team. The Master and PhD students interested, in applying for this competition, need to submit their application, as described on the web site (www.liophant.org/i3m/cantice), to Dr.Marina Massei (massei@itim.unige.it) before the deadline (September 1, 2014). For information about next edition of Gianni Cantice Award, please visit the web site www.liophant.org/i3m/cantice.

I3M Hotel and Venue
The I3M 2014 multiconference will be held at Multi-Purpose Complex Agora, University of Bordeaux
Further Information are available on the web site www.msc-les.org/conf/i3m2014

The Multi-Purpose Complex Agora is located at Domaine du Haut-Square 43 rue Pierre Noailles 33400 Talence.
The main entrance of Upper Square is located in the roundabout at the rue Pierre Noailles and the street in the 7th art.
GPS Coordinates: Latitude: Longitude 44.8089479-: -0.5955238

From the city center of Bordeaux:
Tram line B "Pessac Centre" Stop Forum.

From the train station in Bordeaux - Saint-Jean:
Tram line C towards "The Aubiers" Quinconces.
Then Tramway line B "Pessac Centre" Stop Forum.

From Merignac airport by bus:
Departure Hall B, on arrival level, a shuttle bus runs every 45 minutes, 7/7, the Bordeaux Airport Station Bordeaux, via the city center. Stop "3 Allées de Tourny." Then Tramway line B "Pessac Centre" Stop Forum.

from the Forum station (walking distance):
Up the street from the 7th art (just past the entrance to the Tavern of the 7th art and Cinema Gaumont). At the traffic circle
following: enter the field of Upper Square (2nd exit) and advance to the Agora building

From the ring road (Rocade) by car:
Exit 16 towards Domaine Universitaire.
Go back in the Liberation in Talence.
Go past the main entrance at 351 Cours de la Libération in Talence
At the next roundabout take the 3rd exit onto Pierre Noailles
At 100 meters on the right, entrance free municipal parking
Then continue to the roundabout and enter the field of Upper Square (3rd exit)

The organizing committee has selected a list of possible hotels in Bordeaux downtown, please check the conference website at www.msc-les.org/conf/i3m2014 for further information

Lunches, coffee breaks and a gala dinner will be provided to all conference attendees with regular full registration.

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Author and Chair Guidelines for I3M2014

On the I3M web site guidelines for Track / Session Chairs and for Authors / Presenters are available please check them in order to proper deliver your presentation in best way avoiding any inconvenience.

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I3M as Evolving Framework

Dear attendee, the whole I3M Organization is very glad for having you here and for your support to this important event; we really hope you enjoyed the conference, therefore we are looking forward to further develop and improve it; by participating in I3M it is evident that a major stronghold of this Multiconference is its capability to mix very experience people with young blood. So we will be glad if you could consider to be more involved in future events by submitting session or track proposals, by proposing new topics or by providing your availability for being candidate for paper review; in addition you can find on the web site I3M Quality Assessment Forms for providing your feedback, thanks in advance for your support.

I3M2015, Bergeggi, Italy

I3M2015 will be held next year in Bergeggi, Italy, September 2015. Please consider to be active and to participate in this important event by submitting a paper or even by proposing a track and/or a session to the I3M Organization and Conference Chairs; for further information please check the web site: www.msc-les.org/conf/i3m2015 or write to I3M2015 Program Chair Francesco Longo (f.longo@unical.it)
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InderScience Publisher - International Journal of Engineering Systems Modelling and Simulation
InderScience Publisher - International Journal of Critical Infrastructures
IGI Global Disseminator of Knowledge - International Journal of Privacy and Health Information Management (IJPHIM)
Halldale - The Journal of Healthcare, Education, Simulation and Training
Halldale - The Military Simulation and Training Magazine
Euromerci

Synergies & Other Opportunities

WAMS 2015
WAMS 2015, the Interntaional Workshop in Applied Modeling & SImulation. Please consider to be active and to participate in this thematic workshop; for further information please check the web site: http://www.msc-les.org/conf/wams2015 or write to Dr.Marina Massei (marina.massei@liophant.org)

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Further details on I3M Conferences are available in www.liophant.org/i3m, www.msc-les.org/conf/i3m2014