

Final Program

ESS'2001

18-20. October 2001
Hotel Mercure Marseille Centre, Marseille

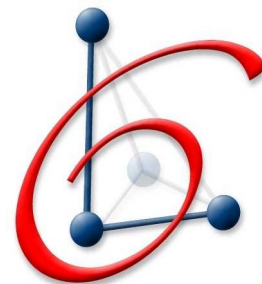


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Contents

Contents

General Information	4
Conference Location	4
How to get there.....	4
Badges.....	4
Tickets.....	4
Registration.....	4
Conference Proceedings.....	4
Need Help?	5
Social Event and Lunches.....	5
Best Paper Award.....	6
Paper Legend	6
Quick Program Overview.....	7
Scientific Program.....	8
Wednesday, October 17	8
Thursday, October 18	9
Friday, October 19	20
Saturday, October 20	33
Conference Locations.....	40
SCS Info	43

General Information

1. Conference Location

The Conference is being held at the Hotel Mercure Marseille Euro-Centre, Rue Neuve Saint Martin, Marseille, France. Tel: +33.4.96.17.22.22 Fax: +33.4.96.17.22.33

The registration desk will be placed in the hallway on the ground floor on the Wednesday afternoon and will be on the first floor from Thursday morning onwards.. Registration will start on Wednesday, October 17, at 3.30 p.m. and on Thursday and Friday from 8.15 a.m. - 5.00 p.m. with Saturday registration only from 8.30 a.m.- 10.00. a.m.

ALL MAPS ARE AT THE BACK OF THIS PROGRAMME

2. Badges

Each registrant will receive a name badge upon registration. The badge must be worn, in order to be admitted to the technical sessions, lunches and social event.

3. Tickets

Extra tickets for the social event and lunches are available from the registration desk. Price: (or equivalent in another currency) for extra tickets

conference dinner:	30 EURO	
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4.Registration

The ESS'2001 Registration Desk will be open for information and registration:

Wednesday, October 17 3.00 p.m. to 5.30 p. m. on the Ground Floor
Thursday, October 18 8.15 a.m. to 5.00 p. m. on the 1st Floor
Friday, October 19..... 8.15 a.m. to 5.00 p. m. on the 1st Floor
Saturday, October 20 8.30 a.m. to 10.00 on the 1st Floor

5. Conference Proceedings

Each fully paid registrant will be provided with a copy of the Conference Proceedings (printed format) **This is NOT applicable to students who are not authors.** (Extra copies, are available on a cash and carry basis at special rates during ESS'2001)

Price:(or equivalent in another currency) for an extra copy

General Information

ESS'2001 Proceedings	100 EURO	675 FF
Other books & CD's	see desk	see desk

6. Meeting Rooms

The meeting rooms are on the 1st floor of the hotel.

Presentations in Room A are Methodology papers

Presentations in Room B are Application Papers

Presentations in Room C are on Transport, Bondgraphs and Neural Networks

Presentations in Room D are on Ecology

Presentations in Room E are on DEVS

Presentations in Room F feature presentations on Agents and on Saturday presentations on Transport and on Methodology

Rooms A and B will be available after the keynotes. They are the main hall split in two.

7. Need Help?

Please see the conference desk for your questions

8. Social Events and Lunches

All registrants are invited to

The **get-together party** on Wednesday October 17th at 5.30 p.m. at the hotel

All **lunches** are served at the restaurant of the Hotel Mercure

The Conference Dinner

All participants are invited to the conference dinner on Thursday the 18th of October.

As we need to give an exact number of participants we would appreciate **your confirmation at the desk before Wednesday evening**. The address can be found in the programme

General Information

a. Best Paper Award

During the conference the papers, which were accepted as extended papers will be judged by the committee in order to choose the best paper of the ESS'2001 conference.

b. Paper Legend:

O= Overhead
SL= Slide Projector
LCD= Projector
VCR= Video
PC= PC

**ALL SESSION CHAIRPERSONS IN THIS PROGRAM ARE
PROVISIONAL**

**THE NUMBERS NEXT TO THE PRESENTATIONS DENOTE
THE PAGE-NUMBERS IN THE PROCEEDINGS. IF NO
NUMBERS ARE MENTIONED THEN THIS PAPER IS NOT
PUBLISHED IN THE PROCEEDINGS**

**THE AUTHORS WHO ARE UNDERLINED ARE NORMALLY
THE PRESENTERS**

**PAPERS IN GREY BOXES ARE THE EXTENDED PAPERS
ELIGIBLE FOR THE BEST PAPER AWARD**

CHECK OUT THE OTHER SCS EVENTS ON OUR WEBSITE:

<http://hobbes.rug.ac.be/~scs>

And

<http://www.scs-europe.org>

WEDNESDAY, 17th OCTOBER 2001

15.00-17.30 REGISTRATION

17.45-19.00 WELCOME PARTY

THURSDAY, 18th OCTOBER 2001

08.15-17.30 REGISTRATION

09.00-10.00 OPENING SESSION AND KEYNOTE SPEECHES IN THE MAIN HALL

10.45-11.15 COFFEE BREAK

11.15-12.45 PARALLEL SESSIONS

	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	SIMULATION METHODOLOGY I	SIMULATION AND CONTROL I	SUPPLY CHAIN AND LOGISTICS SIMULATION I	VEGETATION AND ENVIRONMENT SIMULATION	TUTORIAL I INTRO TO DEVS	BOND GRAPH SIMULATION METHODOLOGY

12.45-14.00 LUNCH BREAK

14.00-15.30 PARALLEL SESSIONS

	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	SIMULATION METHODOLOGY II	EVALUATION FORECASTING AND MONITORING SIMULATION I	SUPPLY CHAIN AND LOGISTICS SIMULATION II	ECOLOGY AND MULTIAGENT SYSTEMS I	TUTORIAL II MODELLING AND SIMULATION OF HYBRID SYSTEMS	MULTI-ELEMENT MODELLING

15.30-16.00 COFFEE BREAK

16.00-18.30 PARALLEL SESSIONS

	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	SIMULATION TOOLS	PRODUCTION PROCESS PLANNING	TRANSPORT EVALUATION AND OPTIMIZATION SIMULATION	DISEASE AND INFECTION SIMULATION	MODELLING METHODOLOGY I	INDUSTRIAL MODELLING I

20.00 CONFERENCE DINNER

FRIDAY, 20th OCTOBER 2001						
08.15-17.00	REGISTRATION					
08.30-10.00	PARALLEL SESSIONS					
	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	DISCRETE EVENT SIMULATION I	SIMULATION AND CONTROL II	BACK-UP SESSION	VEGETATION AND ENVIRONMENT SIMULATION	TUTORIAL III DEVS IN SIMULATION AND CONTROL	MODELLING AND SIMULATION OF SOCIO- TECHNICAL SYSTEMS
10.00-10.30	COFFEE BREAK					
10.30-12.30	PARALLEL SESSIONS					
	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	DISCRETE EVENT SIMULATION II	SIMULATION ON THE FACTORY FLOOR	INDUSTRIAL MODELLING WITH BOND GRAPHS	MATHEMATI- CAL MODELLING	DEVS MODELLING ENVIRON- MENTS I	SOCIAL MODELLING AND SIMULATION
12.30-14.00	LUNCH BREAK					
13.30-15.30	PARALLEL SESSIONS					
	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	PARALLEL AND DISTRIBUTED SIMULATION I	SIMULATION IN ELECTRONICS	NEURAL NETWORKS METHODO- LOGY	VR FOR ECOLOGY	DEVS APPLICATIONS	MODELLING AND SIMULATION OF TRANSPORT AND SUPPLY CHAINS
15.30-16.00	COFFEE BREAK					
16.00-19.00	PARALLEL SESSIONS					
	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	PARALLEL AND DISTRIBUTED SIMULATION II	MECHANICAL SIMULATION	NEURAL NETWORKS APPLICATIONS	SIMULATION AND VR	URBAN MULTI- MODAL TRANSPORT SIMULATION	MODELLING AND SIMULATION OF MANUFACTU- RING SYSTEMS
	FREE EVENING					

SATURDAY 20th OCTOBER 2001

08.30-10.00	REGISTRATION					
08.30 10.00	PARALLEL SESSIONS					
	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	FAULT DETECTION	BACK-UP SESSION	EVALUATION, FORECASTING AND MONITORING SIMULATION II	ECOLOGY AND POLUTION SIMULATION	DEVS MODELLING ENVIRON- MENTS II	URBAN MULTIMODAL TRANSPORT SIMULATION II
10.00-10.30	COFFEE BREAK					
10.30 13.00	PARALLEL SESSIONS					
	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
	APPLIED SIMULATION TECHNIQUES	SIMULATION CASE STUDIES	EVALUATION, FORECASTING AND MONITORING SIMULATION III	ECOSYSTEM MANAGEMENT MODELLING AND SIMULATION	DEVS MODELLING METHODOLOGY II	MULTIBODY SIMULATION
13.15-13.30	CLOSING SESSION AND BEST PAPER AWARD ROOM E					
13.30- 14.30	LUNCH BREAK					
14.30 - 18.00	ROOM A	ROOM B	ROOM C	ROOM D	ROOM E	ROOM F
			SCS MEETING			DEVS STANDARDIZA TION MEETING

Wednesday, 17th October 2001

HALLWAY

Registration

15.00 - 17.30

17.45 - 19.00

ESS'2001 GET-TOGETHER-PARTY

Thursday, 18th October 2001

HALLWAY

Registration

08.15 - 17.30

MAIN HALL

09.00 - 09.15

Opening ESS2001 and Welcome

Welcome Address

**Dr. Norbert Giambiasi
DIAM-IUSPIM
ESS'2001, General Conference Chair**

**Dr. Claudia Frydman
DIAM-IUSPIM
ESS'2001 General Program Chair**

**Dr. Alexander Verbraeck
Delft University of Technology
SCS ESS Conference Coordinator**

Thursday, 18th October 2001

MAIN HALL

09.15 - 10.00

KEYNOTE SPEECH

Chair: Norbert Giambiasi, DIAM-IUSPIM, Marseille, France

A New Era in Complex Information Technology System Design: Bootstrapping Modelling and Simulation with FPGA-Based Hardware Synthesis

Sumit Ghosh

10.00 - 10.45

KEYNOTE SPEECH

Chair: Norbert Giambiasi, DIAM-IUSPIM, Marseille, France

Simulating Autonomous Agents with Augmented Reality

Erol Gelenbe, Khaled Hussain and Varol Kaptan

10.45 - 11.15

COFFEE BREAK

Thursday, 18th October 2001

11.15 – 12.45

ROOM A- 11.15-12.45

METH

SIMULATION METHODOLOGY I

Chair: Claudia Frydman, DIAM-IUSPIM, Marseille Cedex, France

METH-3-O

Genetic Identification of Structured Systems (GISS)

César Zamilpa, Claude Baron, Jean-Claude Geffroy 7

METH-14-O

A Conceptual Approach to Non-Linear Identification and Modeling Based on Expert Systems

Kirill Chernyshov 12

METH-16

Reuse Oriented Prototyping Methodologies for Systems on Chips

M.Robert, L.Torres G.Sassatelli and G.Cambon 17

ROOM B- 11.15-12.45

APP

SIMULATION AND CONTROL I

Chair: to be announced later

APP-6

Application of the B-BAC methodology to the LabView-Based Virtual Controller

Jacek Czczot 197

APP-9

Simulation Based Evaluation of PI, PFC and GMC Control for Electric Heater

Piotr Laszczyk 202

APP-28-O

Modular Testing of Logic Control Functions with Matlab

Emanuele Carpanzano, Luca Ferrarini and Claudio Maffezzoni 206

Thursday, 18th October 2001

ROOM C- 11.15-12.45 **TRANS**
SUPPLY CHAIN AND LOGISTICS SIMULATION I
Chair: Agostino Bruzzone, Univ.of Genoa, Genoa, Italy

TRANS-6-O
Belt-Conveyor-Systems Motion Control Simulation
Ingo Biermann, Volkmar Müller, Rolf Schönfeld, Uwe Heuer and Boris Rathmann **407**

TRANS-2
Supply Chain Management in Connection with Simulation and Optimization
W.Krug, J. Liebelt and B.Baumbach **412**

TRANS-17-O
Modeling and Performance Evaluation of Supply Chain with Batch Deterministic and Stochastic/Petri Nets
H.Chen, L.Amodeo and F.Chu..... **415**

ROOM D- 11.15-12.45 **ECO**
VEGETATION AND ENVIRONMENT SIMULATION I
Chair: Philippe Laval, CNRS, Villefranche sur Me, France

ECO-16-LCD
Towards a Coupling of Continuous and Discrete Formalisms in Ecological Modelling Influences of the Choice of Algorithms on Results
Raphael Duboz, Eric Ramat and Philippe Preux..... **481**

ECO-22-O
Simulation of Routines of Power System Manager's Decision effecting the Natural Environment
Eugeniusz M.Sroczan and Andrzej Urbaniak **488**

STUDENT-1-ECO-O-LCD
The Use of a Case-Based Reasoning Method for Designing Estuarine Models
Sara Passone..... **493**

Thursday, 18th October 2001

ROOM E- 11.15-12.45
DEVS TUTORIAL I

DEVS

DEVS-TUT-I
An Introduction to the DEVS Formalism
Tag Gon Kim

ROOM F- 11.15-12.45
BONDGRAPH METHODOLOGY

BOND

Chair: Jacques LeFevre, Ecole Centrale Lille, Villeneuve d'Ascq, France

BOND-6
Sensitivity Function Determination on a Bond Graph Model
Casimir Sié Kam and Geneviève Dauphin-Tanguy 735

BOND-12
Determination of Flat Output of Linear Bond Graph Model
M. Maligorne, C. Sueur and G. Dauphin-Tanguy..... 740

BOND-9-O
Bond Graphs in a Behavioral Context
Peter J. Gawthrop 745

12.45 - 14.00
LUNCH BREAK

14.00 – 15.30

ROOM A- 14.00-15.30
SIMULATION METHODOLOGY II

METH

Chair: Bernard Espinasse, DIAM-IUSPIM, Marseille, France

METH-31-O
Oscillation Analysis in Winding Mechanisms actuated by Rotating Frictional Drum
Mohammed A. Alnawafleh 20

Parallel Sessions - Thursday

Thursday, 18th October 2001

AGENT-25-METH-O

Real-Time Simulation of PH-Process for Comparative Evaluation of PI, GMC and FPC Algorithms

Krzysztof Stebel 25

METH-26

Variables and Equations in Hybrid Systems with Structural Changes

D.A. van Beek 30

ROOM B- 14.00-15.30

APP

EVALUATION, FORECASTING AND MONITORING SIMULATION I

Chair: Richard Zobel, Manchester University, Manchester, UK

APP-23

Simulation of an Harvester Production System

Wolfgang Kuhn 247

APP-10-O

An Optimal Policy for Supply Planning of Assembly Systems with Service Level Constraint

Mohamed Aly Ould-Louly and Alexandre Dolgui 250

APP-3-TRANS

Evaluation of Machine Shop Logistic Alternatives using Simulation

Edward J. Williams, Dean Darwactor and Lisa Shorkey 255

ROOM C- 14.00-15.30

TRANS

SUPPLY CHAIN AND LOGISTICS SIMULATION II

Chair: Agostino Bruzzone, University of Genoa, Genoa, Italy

TRANS-18-O

An Instructive Example for Pitfalls in Simulation of Logistic Networks

Markus Arns and Falko Bause 420

TRANS-21-O

Model Based Training Methodology in Logistics Information Systems

Leonid Novitski, Egils Ginters and Yuri Merkurjev 424

TRANS-1-APP

An Integer Linear Model for General Arc Routing Problems

Philippe Lacomme, Christian Prins and Wahiba Ramdane-Cherif 427

Thursday, 18th October 2001

ROOM D- 14.00-15.30

ECO

ECOLOGY AND MULTI-AGENT SYSTEMS

Chair: Patrick Coquillard, Univ.de Clermont Ferrand, France

ECO-5

A dedicated Soft Real-Time Simulation of a SALP Swarm in Ada 95

Philippe Laval 499

ECO-9

Suspended Matter Transport in Fluvial Flow for Estuaries Simulation with Mixed Formulation Based on Eulerien, Lagrangien and Multiagent Models

C. Olivier and C. Bertelle..... 504

ECO-11-LCD

Design of a Spatial Multi-Agent Model of a Perennial Grassland Ecosystem grazed by a Herd of Ruminants

Laurent Pérochon, René Baumont, Bertrand Dumont, Pascal D'Hour, Sophie Prache, Michel Petit, Pasxal Carrère, Frédéric Louault, Jean-François Soussana, Claude Mazel, Christine Force and David Hill 509

ROOM E- 14.00-15.30

DEVS

DEVS TUTORIAL II

DEVS TUTORIAL II

Modeling and Simulation of Hybrid Dynamic Structure Systems in the HFSS Formalism

Fernando Barros

ROOM F- 14.00-15.30

BOND

MULTI-ELEMENT MODELLING

Chair: Genevieve Dauphin-Tanguy, ECL, Villeneuve, France

BOND-15

Modelling the Complex Non-Linear Dynamics of Bacterial Population with Kinetic Process Graphs

Marc Baguelin and Jacques LeFèvre 753

Parallel Sessions - Thursday

Thursday, 18th October 2001

BOND-16

Modeling Multi-Element Systems Using Bond Graphs

Jürgen Greifeneder and François E. Cellier 758

BOND-7

3D Kite Modeling with Vector Bond Graphs

Benjamin Decotte, Nicolas Venuti and Barthelemy Boy..... 767

15.30 - 16.00

COFFEE BREAK

16.00 - 18.30

ROOM A- 16.00-18.00

METH

SIMULATION TOOLS

Chair: Wilfried Krug, Dualis, Dresden, Germany

METH-4-BOND-O-LCD

Kinetic Process Graphs: Improving the Stock Flow Method of System Dynamics with Quasi-Bond Graphs and Fuzzy Rules, Applications in Managing Industrial and Business Systems

Jacques LeFevre 37

METH-18-BOND

Linearization of the Bond Graph Model of a Robot RTX

Abderrahmen Gargouri and Moncef Tagina 46

METH-32

Simulation and Knowledge Management: The Role of Groupware

Martin Boulger, Vlatka Hlupic and Simon J.E. Taylor..... 52

METH-43-LCD

The Use of Building Blocks to enhance Flexibility and Maintainability of Simulation Models and Simulation Libraries

Alexander Verbraeck and Edwin Valentin..... 973

Thursday, 18th October 2001

ROOM B- 16.00-18.00

APP

PRODUCTION PROCESS PLANNING

Chair: Claudia Frydman, DIAM-IUSPIM, Marseille Cedex, France

APP-8

Modelling and Simulation of Time-Optimal Clearing Process in Sequencing Batch Reactors

Witold Nocon and Mieczyslaw Metzger..... 313

APP-17-LCD

Modelling and Simulation of the Diffusion Section of a Beet Sugar Process for a Plant Operator Training Simulator

Luis Felipe Acebes and Alejandro Merino and Raúl Alves..... 317

APP-24

Industrial Rice Dryer Simulation Model

J. Martinez Garreiro, R.Canetti, A.Fonseca de Oliveira and M.Hakas 320

APP-29

DAPS: Dynamic Adaptation of Complex Production Systems

Pierre Massotte, Yingjiu Liu and Jihad Reaidy..... 965

ROOM C- 16.00-18.30

TRANS

TRANSPORT EVALUATION AND OPTIMIZATION SIMULATION

Chair: Agostino Bruzzone, Univ.of Genoa, Genoa, Italy

TRANS-5-O

Simulation and Optimization of the Public Transportation Connection System

A.Abbas-Turki, O.Grunder and A.El-Moudni 435

TRANS-19-LCD

Punctuality Evaluation of Airline Networks with Simulation

J.Martens and J.Adem 440

TRANS-16

An IPA-Based Optimization Algorithm to Solve the Multi-Location Transshipment Problem

Yale T. Herer, Michael Tzur and Enver Yucesan 448

TRANS-4-O

Using Simulation to Optimize the Operations of an Emergency Room

Robert Signorile 457

Thursday, 18th October 2001

TRANS-15

Implementation and Evaluation for GA-Based Pipe Route Planning Method

Teruaki Ito 462

ROOM D- 16.00-17.30

ECO

DISEASE AND INFECTION SIMULATION

Chair: M.A.Dubois, SPEC Saclay, Gif sur Yvette, France

ECO-6-O

Simulation of Stochastic Infection Transmission Models designed to inform Water Treatment Decisions

Sada Soorapanth, Stephen E. Chick, and James S. Koopman 517

ECO-17

Computer Simulations for an SEIRS Epidemic Model with Different Types of Seasonal Contact Rate

David Greenhalgh and Islam A. Abdel- Moneim 522

ECO-20-O-LCD

Mathematical Modeling of Rift Valley Fever in Senegal

Marc A.Dubois, Charly Favier and Philippe Sabatier..... 530

ROOM E- 16.00-17.30

DEVS

MODELLING METHODOLOGY I

Chair: Tag Gon Kim, KAIST, Taejon, South Korea

DEVS-13-BOND

GDEVS-Bond Graph Variable Structure Models

Aziz Naamane and Norbert Giambiasi..... 601

DEVS-19-LCD

Modelling and Simulation of Mobile Software Agents in *Caos*

Fernando J.Barros..... 605

DEVS-12-LCD

DHMIF: DEVS-based Hardware Model Interchange Format

Jun-Kyoung Kim, Young Geol Kim and Tag Gon Kim 622

Thursday, 18th October 2001

ROOM F- 16.00-18.00

BOND

INDUSTRIAL MODELLING I

Chair: Yuri Merkuryev, Riga Technical University, Riga, Latvia

BOND-2

Modelling Gas Turbine Systems for Transient Performance using Bond Graphs

Eilif Pedersen 785

BOND-4-SL

Virtual Reality Full Simulator for Electrical Sub-Stations using Word Bond Graphs

Jesus Félez, Jose M.Cabanellas, Maria I. Martinez, Antonio Carretero, Gregorio Romero,

Joaquin Maroto and Carlos Vera..... 792

BOND-14-LCD

Trajectory Tracking on Bond Graphs: Procedures and Applications to DC Electrical Drives

Sergio Junco 799

BOND-11-LCD

Modeling In Order to Size An Automotive Powertrain¹

J. Laffite, J. Bideaux, S. Scavarda, F. Guillemard, M. Ébalard and C. Moutou 806

19.30

assembly in the lobby of the hotel

20.00 (dinner starts)

ESS 2001 Conference Dinner

At

Les Arcenaux

25, Cours d'Estienne D'Orves

Marseille

Tel: +33.(0)4.91.59.80.30

Friday, 19th October 2001

HALLWAY

Registration

08.15 - 17.00

08.30 – 10.00

ROOM A- 09.00-10.00

METH

DISCRETE EVENT SIMULATION I

Chair: Eugene Kerckhoffs, TU Delft, Delft, The Netherlands

METH-5

An Enhanced Methodology for reducing Time Consumption in Discrete Event Simulation Projects

Björn Johansson and Thomas Grünberg **61**

METH-23

JavaSim – A Discrete Event Simulation Library

Wolfgang Kühn **65**

ROOM B- 09.00-10.00

APP

SIMULATION AND CONTROL II

Chair: Norbert Giambiasi, DIAM-ISUPIM, Marseille, France

APP-44-O

Automatic Voltage Control for Power Transformers

Abdallah R. Al-Thaimer and Jalal Abdallah **211**

APP-50-LCD

Emulator for the Digital Control System “Symphony”

Herbert Krause **215**

Friday, 19th October 2001

ROOM C- 08.30-10.00 **AGENT**
MODELLING AND SIMULATION OF SOCIOTECHNICAL SYSTEMS
WITH AGENTS

Chair: Bernard Espinasse, DIAM-IUSPIM, Marseille Cedex, France

AGENT-2-O-LCD

Enhancing the Interaction between a Photovoltaic System and Its Users with a Sociotechnical Simulation Approach

Wernher M. Brucks, Hans-Joachim Mosler and Antonio Joyce..... **875**

AGENT-9

MAGMAS: a Multi-Agents System based on a Dynamical Models coupling; Application to Animal Wastes Management

Manuel Martin, Eric Piquet, François Guerrin and Christophe LePage **881**

AGENT-14

MUFINS : A MultiAgent Toolkit for Simulating Pelagic Fish Behavior in Distributed Multiple Environments

Jean-Cristophe Soulié, David Guyomard and Martin Desruisseaux..... **885**

ROOM D- 09.00-10.00

ECO

VEGETATION AND ENVIRONMENT SIMULATION II

Chair: David Hill, Universite Blaise Pascal, Aubiere Cedex, France

ECO-1-LCD

SISTAL: A Spatial Simulation Model of the Tiller Density in Monospecific Stands of a Perennial Grass

Claude Mazel, David Hill and Michel Lafarge **471**

ECO-2

Virtual Plant Models for studying Interactions between Crops and Environment

Christian Fournier, Bruno Andrieu and Yassine Sohbi..... **476**

ROOM E- 08.30-10.00

DEVS

DEVS TUTORIAL III

DEVS-TUT-I

DEVS in Simulation and Control of Continuous Systems

Ernesto Kofman

Parallel Sessions - Friday

Friday, 19th October 2001

Friday, 19th October 2001

APP-48-LCD

Physically Based Cables for Assembly Simulation in Virtual Reality

Achim Looock and Elmar Schömer 294

APP-47-LCD

A New Algorithm to Compute the Workspace of Mechanisms and its Implementation

Artur Fuhrmann and Elmar Schömer 298

APP-2-LCD

Industrial Design using Simulation and Design of Experiments

Mohamad Masudy..... 304

ROOM C- 10.30-12.00

BOND

INDUSTRIAL MODELLING II

Chair: Sergio Junco, National University of Rosario, Argentina

BOND-13

Bond Graph based Control with Virtual Actuators

Peter J. Gawthrop, Donald J. Ballance and Dustin Vink 813

BOND-5

Effect of Roll Speed on Temperatures in Hot Metal Rolling A Bond Graph Modelling Approach

Surjya K. Pal and Derek A. Linkens 818

BOND-8-LCD

Model Builder for Thermo-Fluid Systems using Bond Graphs and Functional Modeling Model

Belkacem Ould Bouamama..... 822

ROOM D- 10.30-12.30

ECO

MATHEMATICAL MODELLING

Chair: M.K.Traore, Universite Blaise Pascal, Aubiere Cedex, France

METH-38-O-SL

What does a Computer Simulation Prove? The Case of Plant Modeling at CIRAD (France)

Franck Varenne 549

Parallel Sessions - Friday

Friday, 19th October 2001

ECO-15-LCD

**The Use of Random Number Generation for Stochastic Distributed Simulation:
Application to Ecological Modeling**

Mamadou K. Traore and David R.C. Hill 555

ECO-19-O

Optimal Stochastic Design of Anaerobic Digester for Citrus Residuals

Alessandra Frigato Bonello, Pietro Giribone, Roberto Mosca and Sergio Pozzi Cotto..... 560

ECO-20

Mathematical Modelling of the Dynamics of Forest Savanna-Ecotone in Africa

Charly Favier and Marc A. Dubois 568

ROOM D- 10.30-12.00

DEVS

MODELLING ENVIRONMENTS I

Chair: Norbert Giambiasi, IADM-IUSPIM, Marseille, France

DEVS-2-SL

**An Object-Oriented Environment applied to a Semi-Physical Model of Fire Spread
across a Fuel Bed**

Alexandre Muzy, Thierry Marcelli, Antoine Aiello, Paul Antoine Santoni, Jean - Francois Santucci and Jacques-Henri Balbi..... 641

DEVS-3-LCD

**Reusable Models Libraries Integration in a DEVS-Based Modeling and Simulation
Environment**

Fabrice Bernardi, Emanuelle De Gentili and Jean-François Santucci 644

DEVS-6-LCD

Neuro-DEVS, an Hybrid Methodology to describe Natural Complex Systems

Jean-Baptiste Filippi, Paul Bisgambiglia and Marielle Delhom 649

ROOM E- 10.30-12.30

AGENT

SOCIAL MODELLING AND SIMULATION WITH AGENTS

Chair: Quasim Mehdi, Univ.of Wolverhampton, Wolverhampton, UK

AGENT-1

**Using Multi-Agent System to test a Coordination Model of the Prey Capture in Social
Spiders**

A. Dury, G. Vakanas, C. Bourjot, V. Chevrier and B. Krafft 831

Friday, 19th October 2001

AGENT-5-LCD

An Agent-Based Approach of Urban Migration Flows

Christian Mullon, Marie Piron and Jean Pierre Treuil **834**

AGENT-10

Changing the Levels of Description of a Fluid Flow in an Agent-Based Simulation

Pierrick Tranouez, Cyrille Bertelle and Damien Olivier..... **839**

ECO-3-AGENT-29-LCD

How a Conceptual Framework can help to Design Models following decreasing Abstraction

Fredéric Amblard, Nils Ferrand and David R.C.Hill **843**

12.30 - 14.00

LUNCH BREAK

Friday, 19th October 2001

ROOM B- 14.00-15.30 **APP**
SIMULATION IN ELECTRONICS AND SOFTWARE SERVICES
Chair: to be announced later

APP-22
Computerized Speech Simulation: Subjective Evaluation of an Italian Text-to-Speech Synthesizer
Marco Rocchetti, Paola Salomoni and Ivan Collinelli..... **365**

APP-15-O-SL
The Optimal Circuit Reduction Method as an Effective Tool to solve Large and Very Large Size Intractable Combinatorial VLSI Physical Design Problems
Roman Bazylevych **351**

APP-37
Simulating PCB Design Rules using MIDAS
Martin S. Barber and Trevor Bonfield **359**

APP-31
E-Industrial Services Value-Added Simulation Services for the Producing Sector
 Wilfried Sihm and Tom-David Graupner **369**

ROOM C- 14.00-15.30 **NEURAL**
METHODOLOGY
Chair: Jacob Bahren, Oak Ridge National Lab, TN, USA

NEURAL-3
Index of Speedup for FE-Based Neural Networks
Guohe Xu, Guy Littlefair, Richard Penson and Graham King **680**

NEURAL-6-O
Q-Learning and Robotics
Claude F.Touzet and Juan M.Santos **685**

NEURAL-2
Advantages of Partitive Clustering Algorithms based on Potential Functions
Viorel Nicolau, Emil Ceanga and Gheorghe Puscasu **675**

Friday, 19th October 2001

ROOM D- 14.00-15.30

ECO

VIRTUAL REALITY FOR ECOLOGY

Chair: Carlos Luiz dos Santos, UFR, Riode Janeiro, Brazil

ECO-12

The M3-Project: Distributed Environmental Simulation and Virtual Reality

T.Asselmeyer-Maluga, P.Frank, A.Hoheisel, H.Rosé and B.Walter 573

ECO-13-O

Virtual Guanabara Bay used for Pollution Control: First Steps

Carlos Luiz N. dos Santos, Jose L.D. Alves and Luiz Landau 578

ECO-27

OptView - A Virtual Reality Geometric Optimization System for Offshore Petroleum Platforms

Robson de Cunha Santos, Gerson Gomes Cunha, Maria Célia Santos Lopes and Nelson Francisco Favilla Ebecken 582

ROOM E- 14.00-15.30

DEVS

APPLICATIONS

Chair: Ernesto Kofman, Rosario, Argentina

DEVS-7-LCD

Vehicle Routing Techniques in Cellular Models of Urban Traffic

Andrea Díaz, Verónica Vázquez and Gabriel Wainer 657

DEVS-11-O

Modelling and Simulation of Industrial Accidents based on the DEVS Formalism

Jean-Marc Mercantini, Ronald Loschmann and Eugene Chouraqui..... 662

DEVS-14-SL

Use of the Visual-DEVS Simulation Tool for Modeling Electronic Transactions Systems

Iván Melgrati, Carlos Giorgetti and Ana Rosa Tymoschuk..... 667

ROOM F- 13.30-15.30

AGENT

MODELLING AND SIMULATION OF TRANSPORT AND SUPPLY CHAINS WITH AGENTS

Chair: Robert Signorile, Boston College, Boston, USA

AGENT-3

Modelling and Simulation of Supply Chains with a Multi Agent System

Alain Ferrarini, Olivier Labarthe and Bernard Espinasse 893

Friday, 19th October 2001

AGENT-11
A Methodology based on Multiple Views for Multi-Agent Systems in Simulation, Application to the Transportation Domain
 Pablo Gruer, Vincent Hilaire, Abder Koukam and Saïd Hayat **898**

AGENT-15
Multi-Agent Road Traffic Simulation: The Coordination Issue
Alexis Champion, Stephane Espié, René Mandiau and Christophe Kolski..... **903**

AGENT-20
Aligning Inventory Control Decisions in Decentralized Supply Chains
Yonghui Fu and Rajesh Piplani..... **909**

15.30 - 16.00
COFFEE BREAK

16.00 - 19.00

ROOM A- 16.00-18.00 **METH**
PARALLEL AND DISTRIBUTED SIMULATION II
 Chair: Claudia Frydman, DIAM-IUSPIM, Marseille Cedex, France

METH-19-SL
A Comparative Analysis of the Reliability of Simple and Two-Level Checkpointing Techniques in Two Different Distributed Industrial Control Systems Architectures
Alicia Rubio and Rafael Ors **100**

METH-20
Design and Performance Evaluation of Sequential Standardized Time Series Procedures under Multiple Replications in Parallel
Edjair Mota..... **105**

METH-7
The Impact of Communication in Distributed Simulation
 Pentti Huttunen, Jouni Ikonen and Jarri Porras..... **111**

METH-35-LCD
The Analysis of a Star-Topology Information System Network
Alexander Andronov, Nikolay Fyodorov and Julija Glaza..... **116**

Friday, 19th October 2001

ROOM B- 16.00-18.30

APP

MECHANICAL SIMULATION

Chair: A. Naamane, DIAM-IUSPIM, Marseille Cedex, France

APP-18-LCD

Worker Tools to Model Static Converters for their Sizing with an Optimisation Approach

Cherif Larouci, Eric Atienza, Jean-Paul Ferrieux, Laurent Gerbaud and James Roudet..... **221**

APP-27-O

System Dynamics Simulation Modeling and Heuristic Optimisation of the Induction Motor

Ante Munitić, Luko Milić and Matko Bupić..... **226**

APP-33-O

Simulation of an Electro-Hydraulic Servo-Valve in Nut Programming Environment

Gunnar Grosschmidt and Mait Harf..... **229**

APP-34-O

Multi-Pole Modeling of an Electro-Hydraulic Servo-Valve

Gunnar Grosschmidt **234**

APP-39

Indirect Measurement of Steel Temperature in Converter

Karol Kostur..... **240**

ROOM C- 16.00-19.00

NEURAL

APPLICATIONS

Chair: Claude Touzet, University of Provence, Marseille, France

NEURAL-1-O

Simulation of Oil Well Pseudo Logs Using a Neural Network with Ultrafast Learning

Jacob Barhen **691**

NEURAL-4

Fine-Tuning of a North Sea Model with the aid of GMDH Neural Networks

M.C.Schrijver, K.Saman and E.J.H.Kerckhoffs..... **696**

TRANS-12-NEURAL-7

Scheduling and Sequencing Jobs on Machines by Simulated Annealing-based Heuristics

Fidel Torres, Andrés Troncoso and Pascal Blanc **705**

Parallel Sessions - Friday

Friday, 19th October 2001

NEURAL-8
Dynamical Networks for Information Processing
Michail Zak 709

METH-21-NEURAL
Feature Selection for Financial Trading Rules
Ian Cloete and Andrew Skabar..... 713

NEURAL-13
Cancer Detection using Neural Computing Methodology
 Hamid S.Kohen, Gregory H.Bearman, Nikzad Toomarian and David B.Seligson 725

ROOM D- 16.00-18.00 **APP**
SIMULATION AND VIRTUAL REALITY
 Chair: Richard Zobel, Manchester University, Manchester, UK

METH-9-LCD
Virtual Reality in the Design Process: from Design Review to Ergonomic Studies
Guillaume Moreau and Philippe Fuchs..... 123

AGENT-27-METH
Multi-Agent Modelling Behaviours in Virtual Environments
Q.H.Mehdi, Z.Wen and N.E.Gough..... 131

ECO-26-METH
SPAR: A Realistic Virtual Environment Offshore Floating Platforms Simulation System
 Gerson Gomes Cunha, Maria Célia Santos Lopes, Luiz Landau, Nelson Francisco Favilla
 Ebecken and Luis Augusto Petrus Levy 135

METH-36
**TCP/IP-Based Virtual Control Systems – A Low Cost Alternative for Realistic
 Simulation of Control Systems**
Mieczyslaw Metzger 140

ROOM E- 16.00-18.30 **TRANS**
URBAN MULTIMODAL TRANSPORT SIMULATION I
 Chair: Andre Bargiela, Nottingham Trent Univ, Nottingham, UK

TRANS-11-O
Decision Support for Planning Multi-Model Urban Travel
Joanna Hartley and Andre Bargiela 387

Friday, 19th October 2001

TRANS-8

A Bootstrap Approach to Modelling and Simulation of a Seaport Container Terminal
Antonio Tiano, Marta Cuneo, Filippo Grassia and Giuseppe Soncin 392

TRANS-13

Industrial Customization of Maritime Simulation and Information Systems in the Latvian Port Areas
Leonid Novitski, Egils Ginters, Yuri Merkuryev, Galina Merkuryeva, Vasily Ragozin and Elena Victorova 396

TRANS-14-O-LCD

Simulation of an Intermodal Rail Freight Terminal
Isabel Garcia, Gil Gutiérrez and Raúl Moreno 399

TRANS-3-O-LCD

Simulation Model for the Redesign of the Spanish Combined Rail Transport Network
Isabel Garcia, Gil Gutiérrez and Raúl Moreno 402

ROOM E- 16.00-18.30

AGENT

MODELLING AND SIMULATION OF MANUFACTURING SYSTEMS WITH AGENTS

Chair: Alexander Verbraeck, TU Delft, Delft, The Netherlands

AGENT-4

Multiagent Modeling and Simulation of Workshop Disruptions Management by Cooperative Rescheduling Strategies
Erwan Tranvouez, Alain Ferrarini and Bernard Espinasse 917

AGENT-6

Managing Knowledge with Coterries of Noisy Agents
Jean-Paul A. Barthès 925

AGENT-22

Configuration of Agent-oriented Manufacturing Systems Using a Petri Net-based Simulation Approach
Boris Sussmann, Ralf Neubert, Armando W.Colombo and Ronald Schoop 929

AGENT-28-LCD

OCEAN- A Multi-Agent Market for Distributed Systems Control
Carine Bournez, Guillaume Beslon and Joël Favrel 934

Parallel Sessions - Friday

Friday, 19th October 2001

AGENT-17-O-SL

Towards an Agent-Based Production Control in the Semiconductor Industry

Lars Mönch **941**

FREE EVENING

Saturday, 20th October 2001

HALLWAY

Registration

08.30 - 10.00

08.30 – 10.00

ROOM A- 09.00-10.00

BOND

FAULT DETECTION

Chair: François Cellier, University of Arizona, Tucson, USA

BOND-1-LCD

Application of Fault Detection and Isolation Mechanisms to Filling Batteries Devices System Modelled by Bond Graph and Petri Nets

Nadia Zanzouri, Mekki Ksouri and Moncef Tagina **775**

BOND-10

Design of Failure Diagnosis System Based on System Bond Graphs

Takehisa Kohda and Koichi Inoue **780**

ROOM B- 09.00-10.00

BACK-UP

BACK-UP SESSION

Chair:

This session is set up for those authors who could not present their papers in the allocated time-slots.

ROOM C- 09.00-10.00

APP

EVALUATION, FORECASTING AND MONITORING SIMULATION II

Chair: Alexander Verbraeck, TU Delft, Delft, The Netherlands

APP-19

Simulation Analysis of an Integrated Cross-Factory Process: A Case Study

Yung-Hsin Wang, Yo-Chan Kao and Chia-The Su **261**

APP-40-O

Planning Production Forecasting for Manufacturing SME: An Application Based on AutoschedTM Tool

Gabriele Bruzzone, Alessandra Frigato Bonello, Sergio Pozzi Cotto and Flavio Tonelli **265**

Saturday, 20th October 2001

ROOM D- 09.00-10.00 **ECO**
ECOLOGY AND POLLUTION

Chair: William Conley, Univ.of Wisconsin at Green Bay, USA

ECO-7

Fuzzy Inductive Reasoning for the Prediction of Maximum Ozone Concentration

Pilar Gómez, Angela Nebot, Francisco Mugica and Franz Wotawa..... 535

ECO-10

Ecological Optimization of Pollution Control Equipment

William Conley 543

ROOM E- 09.00-10.00 **DEVS**
MODELLING ENVIRONMENTS II

Chair: Fernando Barros, Universidade do Coimbra, Coimbra, Portugal

DEVS-8-LCD

Defining DEVS Models with the CD++ a Toolkit

Gabriel Wainer, Gastón Christen and Alejandro Dobniewski 633

DEVS-9-LCD

Meta-Compiling Traffic Models in TSC

Mariana Lo Tártaro, César Torres and Gabriel Wainer 638

ROOM F- 09.00-10.00 **TRANS**
URBAN MULTIMODAL TRANSPORT SIMULATION II

Chair: Yuri Merkurjev, Riga Technical University, Riga, Latvia

TRANS-9-O

Incremental Modelling and Multi-Modelling for Urban Traffic Systems

Michelle Chabrol, David Sarramia and Nikolay Tchernev 377

TRANS-22

Real-Time Micro Simulation of Urban Traffic

Isakki Kosonen and Andrzej Bargiela..... 382

10.00 - 10.30

COFFEE BREAK

Saturday, 20th October 2001

10.30 - 13.00

ROOM A- 10.30-12.30

METH

APPLIED SIMULATION TECHNIQUES

Chair: Carmen Bobeanu, Ghent University, Ghent, Belgium

METH-1-LCD

Efficient Interaction Model between Rigid and Deformable Objects

Christophe Caby and André Crosnier 145

METH-45

Forwards and Backwards MSMCO Simulation Programs with Applications

William Conley 150

METH-37

Comparative Simulation Studies of Model-Extended PI Control of CSTR

Mieczyslaw Metzger 153

METH-17-TRANS

Identifying Best Predictors for Car Following Behavior from Empirical Data

Pengjun Zheng and Mike McDonald 158

ROOM B- 10.30-12.30

METH

SIMULATION CASE STUDIES

Chair: Andre Bargiela, Nottingham Trent University, Nottingham, UK

METH-33-SL

Simulation Games: Theory and Systems

G. Albano, C.d'Apice, T.Durante and S.Salerno 169

METH-27-O

Performance Modeling in the Large: A Case Study

Bart Theelen, Jeroen Voeten, Leo van Bokhoven, Piet van der Putten, Alex Niemegeers and Gjalt de Jong..... 174

METH-40-APP-SL

A Generic Simulation Model for an Industrial Problem

Corinne Boutevin, Nicolas Cossard, Michel Gourgand, Sylvie Norre and Marcel Beauseigneur 182

Parallel Sessions - Saturday

Saturday, 20th October 2001

METH-10-20-LCD

Reduced Simulation Models for Medium-Term Production Scheduling

Sven Völker, Tortsen Munkelt and Peter Gmilkowsky 187

ROOM C- 10.30-12.30

APP

EVALUATION, FORECASTING AND MONITORING SIMULATION III

Chair: Vlatka Hlupic, Brunel University, Oxbridge, United Kingdom

APP-46

Discrete Events Simulation Model for Performances Analysis in an Industrial Case Study

Alexandre Dolgui, Philippe Lacomme and Dalila Bekhouche 270

APP-38-LCD

Monitoring Industrial Accidents using a Reactive Simulation System

Alessandro Amoroso and Filippo Bezzi..... 272

APP-1-O

Structure of Early Failure Detection System DEMO

A.Bajbulatov, M.Byvaikov, E.Jharko, A.Poletykin and M.Zuenkov 277

APP-X

Analyses of Deformation Elements for Bending

Ghazi Al-Marahleh..... 280

ROOM D- 10.30-13.00

AGENT

ECOSYSTEM MANAGEMENT MODELLING AND SIMULATION WITH AGENTS

Chair: Bernard Espinasse, DIAM-IUSPIM, Marseille Cedex, France

AGENT-8-O

A Multi-Agent System to simulate Water Attribution among Farmers

Marjorie Le Bars and J.M. Attonaty 851

AGENT-21-LCD

Model Uncertainty derived from Choice of Agent Rationality – a Lesson for Policy Assessment Modeling

Matt Hare and Claudia Pahl-Wostl 854

Saturday, 20th October 2001

AGENT-28-2

Modeling Human Decision Making in the Hyrdraulic Management of the Camargue

Nathalie Franchesquin and Bernard Espinasse 860

AGENT-13

OSIRIS System: An Architecture for coupling Environmental Processes with Agents

Edem Fianyo, Jean-Pierre Treuil and Suzanne Pinson 864

AGENT-7-O-LCD

Multi-Agent Based Modelling to Change the Environmental Behaviour of a Population of 10,000 Persons

Hans-Joachim Mosler..... 867

ROOM E- 10.30-12.30

DEVS

MODELLING METHODOLOGY II

Chair: Gabriel Wainer, Carleton University, Ottawa, Canada

DEVS-1

DEVS Representation of Differential Equation Systems: Review of Recent Advances

Ernesto Kofman, J.S. Lee and B.P. Zeigler..... 591

DEVS-10

Using a DEVS Simulator for the Recognition of Chronicles: An Example with the ELP Language

M. Le Goc and C.Frydman, L.Torres and N.Giambiasi..... 611

DEVS-18

Min-Max DEVS: A New Formalism for the Specification of Discrete Event Models with Mix-Max Delays

Norbert Giambiasi and Sumit Ghosh 616

DEVS-15-LCD

Abstract Simulators for Continuous Flow Specified Systems

Fernando J.Barros..... 596

Saturday, 20th October 2001

ROOM F- 10.30-13.00

APP

MULTIBODY SIMULATION

Chair: Claudia Frydman, DIAM-IUSPIM, Marseille Cedex, France

APP-12-O

Modeling of the Sheet Spring with Curvilinear Axis

Mayyas Al-Mahasneh 325

APP-49-O

Simulation of Intelligent Fuzzy-Based Active Suspension Systems

Morteza Montazeri-Gh and M.Kashani Azad 329

APP-32-LCD

Simulation of Non-Rigid Products: An Industrial Application related to Car Soft Top Design

M.Benassi, G.Colombo, U.Dugini and C.Rizzi 334

APP-13-O

The Testing Process of an articulated Flying Vehicle Simulation

Fariborz Saghafi 339

APP-21-O-LCD

Modelling, Simulation and Visualization of Simultaneous Five-Axis Milling with a Hexapod Machine Tool

K.Weinert and A.Zabel 344

ROOM A 13.15 - 13.30

BEST PAPER

CLOSING SESSION AND BEST PAPER AWARD

Chair: Norbert Giambiasi, DIAM-IUSPIM, Marseille Cedex, France

13.30 - 14.30

LUNCH BREAK

Saturday, 20th October 2001

14.30 - 18.00

ROOM C- 14.30-18.00

SCS CONFERENCE BOARD AND COUNCIL MEETING

SCS

ROOM F- 14.30-16.00

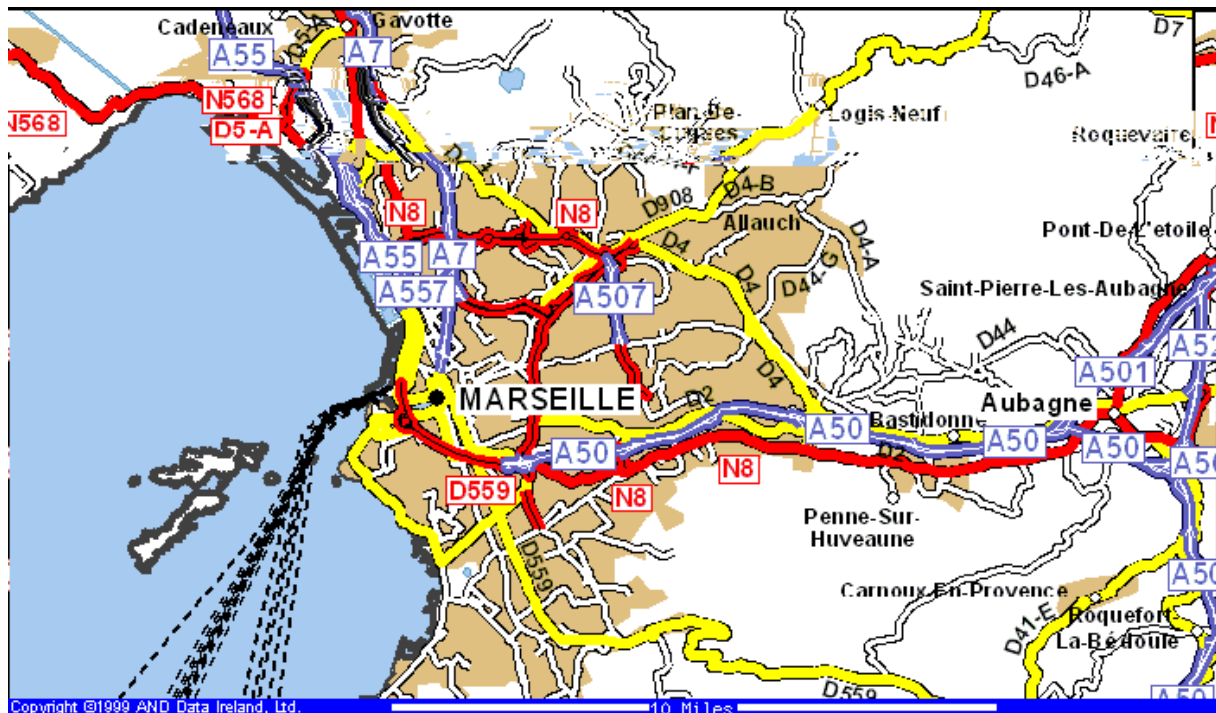
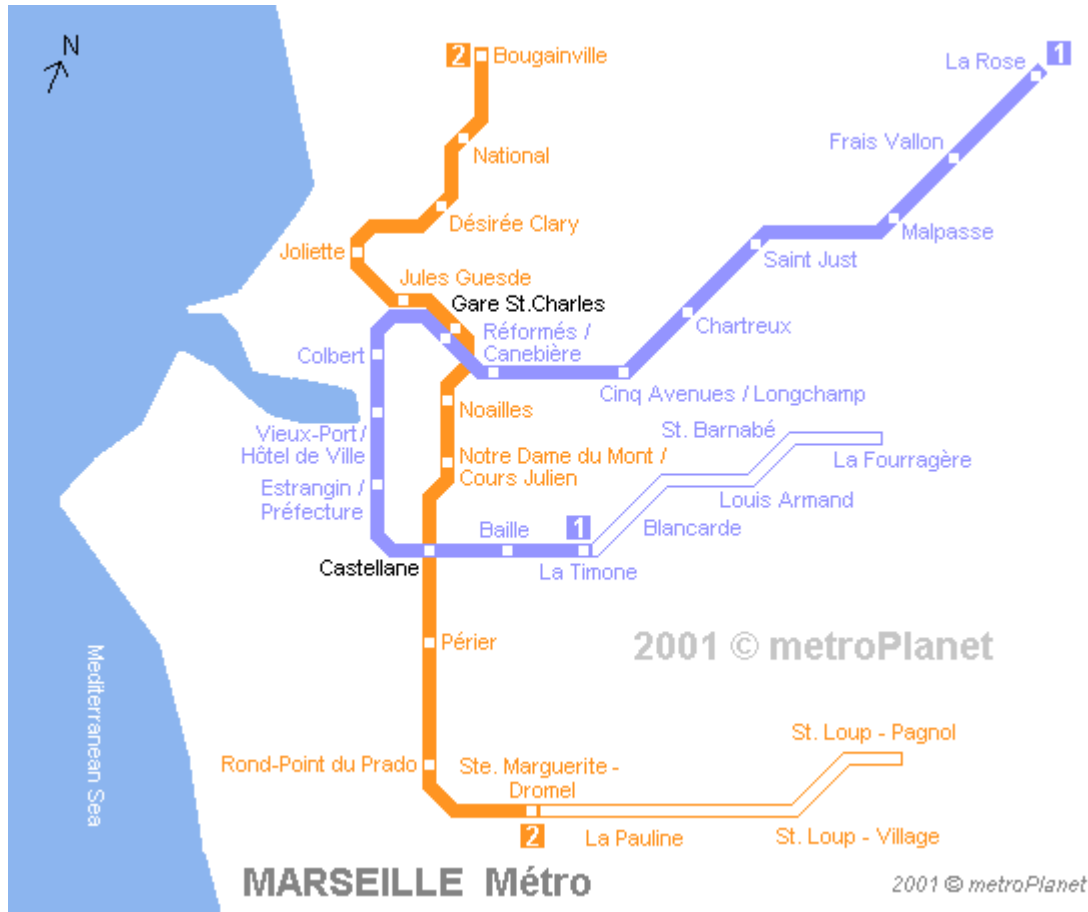
MEETING OF THE DEVS STANDARDIZATION GROUP

Chair:

DEVS

Parallel Sessions - Saturday

Conference Site Maps



Conference Site Maps

Conference Site Maps



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