

Annual Report of the McLeod Institute of Simulation Sciences

Genoa Center, Italy

Center Postal Address:	MISS Genoa Center via Molinero 1, 17100 Savona, Italy
Center Director:	Prof. Agostino G. Bruzzone
Center Phone:	Tel +39 019 97 398
Center Fax:	Fax +39 019 97 600
Center E-mail:	Email agostino@itim.unige.it
Center Web Address:	URL http://st.itim.unige.it/mcleod
List of Research Activities & Projects	<p>Production & Assembling APIS: Power Plant Service (Ansaldo) 2006</p> <p>Logistics Networks & Supply Chain Management CYBERSAR Simulator for Portainer, (CFLI, University of Cagliari) 2006</p> <p>TRAMAS: Simulation in Transportation Management (Ministry of Transportation) 2006</p> <p>WORLDIS4ME: WOrld Risks, resiLience Developments & Issues in Security for Supply Chain Management Simulation as support for Small Medium size Enterprises, (Ministry of Education) 2006</p> <p>MASC New Generation: New DSS including Simulation & Forecasts (COOP Liguria) 2005</p> <p>RESET: Training Simulator for River Boat (CFLI, Regione Piemonte) 2005</p> <p>INNOVARE: Training Simulator for Truck and Contstacker (CFLI, Regione Piemonte) 2005</p> <p>Business & Services CARNI: Meat Distribution Processes (COOP Liguria) 2006</p> <p>POA NG: Automated Reordering System for Store (COOP) 2005</p> <p>Service for the Society KATRINA STYLE: Simulation applied to Crisis Management (Ministry of Transportation) 2006</p> <p>6EFFE: Parental Support for Work Scheduling (COOP Liguria) 2005</p> <p>Military Applications PIOVRA: Intelligent Agent for CGF (Italian MoD, LSIS, DGA France) 2005</p>
List of Educational	“Modeling & Simulation” and “Project Management & Concurrent Engineering in R&D Projects”, PhD Courses, University of Genoa , Italy, 2006
- Title - Type [University Course/Professional Course] - Year	“Transportation management”, Professional Course , Roma-Milano, Italy (Ministry of Transportation) 2006

	<p>"HLA Round table", Workshop, Roma, Italy, (MIMOS) 2006</p> <p>KATRINA: Distance Lecture at Darmouth College, USA, 2005</p>
Center publications	<p>*A.P. Reverberi, A.G. Bruzzone, Enrico Briano, (2006) "Potential of Simulation in Nanosurfaces Formation", Proceedings of SpringSim, Huntsville, Al, April 2-6</p> <p>*S. Poggi, L. Buccianica, C. Oderigo (2006) "ACASO – Advanced Carrier Acquisition cost Simulation & Optimization" Proceedings of ICAMES, Istanbul, May 2006</p> <p>*F.Longo, G.Mirabelli, E.Briano, M.Brandolini (2006) " Container Terminal Scenarios Analysis And Awareness Trough Modeling & Simulation" Proceedings of ECMS, Bonn, GE, May 2006</p> <p>*A.Bruzzone, E.Briano (2006) "Simulation As Decision Support For Evaluating Life Cycle Costs On New Vessels" Proceedings of AMS, Buzios, BR, April 2006</p> <p>*A.Bruzzone, E.Briano (2006) "Simulation Of Truck Operations Connecting A Logistics Networks" Proceedings of AMS, Buzios, BR, April 2006</p> <p>*A.Bruzzone, M.Massei (2006) "Virtual Reality As Support For Terminal Operation" Proceedings of AMS, Buzios, BR, April 2006</p> <p>* Longo F., Bruzzone A.G., (2005) "Modeling and Simulation Applied to Security System", Proceedings of SCSC2005, Philadelphia, July25-28</p> <p>* Bruzzone A.G., Brandolini M. (2005) "Advanced Model for Truck Transportation Analysis", Proceedings of SCSC2005, Philadelphia, July25-28</p> <p>* Bruzzone A.G., Genco P., Bocca E., Pengo L. (2005) "Development of a Model for Evaluating Comparative Evolution of Logistics in Retail", Proceedings of SCSC2005, Philadelphia, July25-28</p> <p>* Bruzzone A.G., Saavedra S. (2005) "Production Optimization Of A Flexible Manufacturing Cell Using Genetic Algorithms And Simulation", Proceedings of MAS2005, Bergeggi, October 16-18</p> <p>* Bruzzone A., Longo F., Papoff E. (2005) "Metrics For Global Logistics And Transportation Facility Information Assurance, Security, And Overall Protection", Proceedings of ESS2005, Marseille, 20-22 October</p> <p>* Bruzzone A.G., Briano C., Poggi S. (2005) "Modelling Life Cycle Of Very Complex Systems: Aircraft Carrier Case Study", Proceedings of HMS2005, Marseille, 20-22 October</p> <p>* Longo F., Mirabelli G., Bruzzone A. (2005) "Container Handling Policy Design By Simulation Framework", Proceedings of HMS2005, Marseille, 20-22 October</p> <p>* Briano E., Bruzzone A., Cecada M., Garassino G. (2005) "Tecniche Simulative Avanzate per il Supporto Decisionale nella Organizzazione della Linea di Montaggio di un Velivolo", Virtuality 2005, Turin, November 3-6</p> <p>* Bruzzone A.G., Williams E. (2005) "Summer Computer Simulation Conference", SCS, San Diego, ISBN 1-56555-299-7 (pp 470)</p> <p>* Bruzzone A.G., Mosca R., Briano C., Williams E. (2005) "Modelling & Applied Simulation 2005", DIP Press, Genoa, ISBN 88-900732-8-4 (pp 97)</p> <p>* Barros F., Bruzzone A.G., Frydman C., Giambiasi N. (2005) "International Mediterranean Modelling Multiconfernece - Conceptual Modelling & Simulation Conference", LSIS Press, ISBN 2-9520712-2-5 (pp 232)</p> <p>* Bruzzone A.G., Frydman C., Junco S., Dauphin-Tanguy G. (2005) "International Mediterranean Modelling Multiconfernece - International Conference on Integrated Modelling and Analysis in Applied Control and Automation", LSIS Press, ISBN 2-9520712-5-X (pp 194)</p> <p>*Bruzzone A.G., Brandolini M., Frydman C., Merkuriev Y. (2005) "International Mediterranean Modelling Multiconfernece - International Workshop on Harbour, Maritime and Multimodal Logistics Modelling and Simulation", LSIS Press, ISBN 2-9520712-4-1 (pp 94)</p> <p>*Bruzzone A., Briano E., Scarso K. (2005) "M.A.C.A.C.O. - Modelling Air Craft Analysis for Construction process and Organization", Tech.Report of ICAMES2005, Istanbul May 7-14</p> <p>Bruzzone A.G., (2005) "Distributed Simulation and Dynamic Management for Aerospace Industry Supply Chain", Invited Speech in IFORS2005, Honolulu, July 11-15</p> <p>* Bruzzone A.G., (2005) "Advances In Simulation For Training In Logistics", Invited Speech in MAS2005, Bergeggi, October 16-18</p> <p>Bruzzone A.G., Brandolini M. (2005) "CAPE", CCNO Technical Report, Milan, Italy</p> <p>* Bruzzone A.G., Brandolini M., Longo F. (2005) "EPEO", CCNO Technical Report, Milan, Italy</p> <p>* Bruzzone A.G., Brandolini M., Viazzo S., Bocca E. (2005) "Retail Logistics", CCNO Technical Report, Milan, Italy</p> <p>* Bruzzone A.G., Briano C. (2005) "POA/PRA", CCNO Technical Report, Milan, Italy</p> <p>* Bruzzone A.G., Mosca R., Briano C., Bocca E. (2005) "POA NG", COOP Liguria Technical Report, Genoa, Italy</p>

	<p>* Bruzzone A.G., Mosca R., Briano C., Bocca E. (2005) "6EFFE", COOP Liguria Technical Report, Genoa, Italy</p> <p>Brandolini M., (2005) "CYBERSAR Workshop - Cyber Infrastructure per la Ricerca Scientifica e Tecnologica in Sardegna", Panel Session in MAS2005, Bergeggi, October 16-18</p> <p>* Briano C., (2005) "RESET Workshop: River Equal Ship Simulation in Extensive Training ", Panel Session in MAS2005, Bergeggi, October 16-18</p> <p>* Briano E., Bocca E., Massei M., Garassino G. (2005) "Modelling Industrial Facilities For Reengineering Assemblying Processes In Aerospace Industry", Proceedings of MAS2005, Bergeggi, October 16-18</p> <p>* Viazzo S., Longo F., Mirabelli G. (2005) "Simulation And Design Of Experiments For Analyzing Security Issues In Container Terminals", Proceedings of MAS2005, Bergeggi, October 16-18</p> <p>* Poggi S., Briano C., (2005) "Virtual Prototyping For Evaluating New Vessel Life Cycle Costs", Proceedings of MAS2005, Bergeggi, October 16-18</p> <p>* Bocca, E., Briano C., Briano E., (2005) "Modeling Interoperability Within Logistics Nodes", Proceedings of WMSCI, July 10-13</p> <p>* Briano E.,Bocca E. (2005) "Modeling Assemblying and Organization in Aircraft Production", Proceedings of SCSC2005, July 24-28</p> <p>* Viazzo S., Massei M., (2005) "Using Simulation as Support for Optimizing Distribution Policies in Critical Conditions", Proceedings of SCSC2005, July 24-28</p> <p>* Bocca E., Briano C. (2005) "Optimizing Inventory Management in Retail Supply Chain", Proceedings of SCSC2005, July 24-28</p> <p>* Bianconi F., Saetta S. A., Tiacci L. Viazzo S. (2005) "A web-based system to simulate a competitive design environment", Proceedings of SCSC2005, Philadelphia, July25-28</p> <p>* Briano E., Bocca E., Rocca A. (2005) "Competitive and Cooperative Training in Logistics by Using Simulation", Proceedings of SCSC2005, Philadelphia, July25-28</p> <p>* Brandolini M., Briano C., Viazzo S. (2005) "Human Behavioral Models For M&S Applications", Proceedings of ESS2005, Marseille, 20-22 October</p> <p>* Bocca E., Massei M., Briano E. (2005) "Artificial Neural Networks As Support For Production Control In Aerospace Industry", Proceedings of ESS2005, Marseille, 20-22 October</p> <p>* Viazzo S., Papoff E., Mirabelli G. (2005) "Conceptual Model For Analysis Of Costs/Risk/Quality Within Railway Activities", Proceedings of HMS2005, Marseille, 20-22 October</p> <p>* Massei M., Briano E., Bocca E., (2005) "Port Infrastructures Security: A new Framework for Modelling & Simulation", Proceedings of HMS2005, Marseille, 20-22 October</p> <p>* Longo F., Viazzo S., Bocca E. (2005) "Developing Data Fusion Systems Devoted To Security Control In Port Facilities", Proceedings of Wintersim2005, Orlando, December 3-6</p> <p>* Briano C., Frydman C., Guasch A., Piera M.A. (2005) "International Mediterranean Modelling Multiconference - European Modelling & Simulation Symposium", LSIS Press, ISBN 2-9520712-3-3 (pp 260)</p> <p>Revetria R., Briano E., (2005) "Integrating HLA in Real Life Applications: Tools, Techniques and Criticalities", Invited Presentation in Proceedings of the International Conference on HLA Simulation Methodology and Application, Lerici, June 2005</p>
Center simulation tools	<p>Simulation software</p> <p>C/C++, Java, Visual Basic Arena, Horus, WinOp, Modsim III, Taylor II, Proservice, Simulink, Pasion,GPSS/H NeuralWare Pro, etc.</p> <p>Simulation Hardware</p> <p>Logistics Laboratory (16 PC), HLA Laboratory (6 PC), DIP Labs (3 PC), WILD Mobile Lab (5 Laptops), VR Lab (1 SGI, 1 WS, 6 VRPC)</p>
Center highlights	<p>Scientific Activities</p> <p>The MISS organized the following events:</p> <p>WORKSHOP PIOVRA, Savona, Italy, in Co-operation with Liophant, 2006</p> <p>WORKSHOP HMS2005, Marseille ,FR, in Co-operation with LSIS Marseille</p> <p>WORKSHOP MAS2005, Bergeggi, Italy in Co-operation with Liophant</p>

Active Participation At Conferences

ECMS, Bonn, G, 2006
ICAMES, Istanbul, T, 2006
AMS, Buzios, BR, 2006
SIW, Huntsville, USA, 2006
WinterSim, Orlando, USA, 2005
IITSEC, Orlando, USA, 2005
ESSM, Marseille, FR, 2005
HMS, Marseille, FR, 2005
I3M, Marseille, FR, 2005
MAS, Bergeggi, Italy, 2005

Exchange Programs in MISS Genoa Centre**MISS Genoa Guests:**

Prof. Gerson Cunha, from LAMCE/UFRJ, Rio de Janeiro, BR (June 2006)

Sergui Saavedra, Doctoral Candidate, Department of Engineering Science, University of Oxford, UK (October 2005)

Prof. Rathana Guha, from UCF, Orlando, USA (September 2005)

MISS Genoa Visitors

Federico Tralongo Visiting LAMCE/UFRJ, Rio de Janeiro, BR, (June/July 2006)

A.Bruzzone, Guest in Bogazici University Istanbul (May 2006)

Simonluca Poggi, Caterina Oderigo, Federico Tralongo, Luca Bucchianica Guests in ENSO Istanbul (May 2006)

Simone Viazzo Guest in NASA booth at IITSEC Orlando, USA (December 2005)

Sonia Rosa, Luca Bucchianica, Andrea Di Costanzo visiting Universidade Panamericana, Mexico City, MX (November/December 2005)

Enrico Bocca visiting KSC Orlando, USA(August 2005)