

Conference Program

May 13, 2009

1A Special session: Emerging Innovation and Strategic Pattern: An IS Focus

Location: M-2002

Chair: Poulin, Diane, Université Laval

10:30 A Scenario Planning Approach for Modelling Hybrid Demand (e-commerce “+” Traditional) Evolution

Canetta, Luca, École Polytechnique Fédérale de Lausanne

Cheikhrouhou, Naoufel, École Polytechnique Fédérale de Lausanne

Gardon, Rémy, École Polytechnique Fédérale de Lausanne

11:00 Dynamic Pricing Models for ERP Systems Under Network Externality

Hajji, Adnene, École Polytechnique de Montréal

Pellerin, Robert, École Polytechnique de Montréal

Gharbi, Ali, École de Technologie Supérieure

Léger, Pierre-Majorique, HEC Montréal

Babin, Gilbert, HEC Montréal

11:30 The Strategic Role of Information Technology in the Value Creation Process of Small and Medium Enterprises: Integrating Business Models, Performance and Assimilation

Cimon, Yan, Université Laval

Poulin, Diane, Université Laval

Pellerin, Robert, École Polytechnique de Montréal

Frayret, Jean-Marc, École Polytechnique de Montréal

Karuranga, Égide, Université Laval

1B Green and Sustainable Supply Chains

Location: M-2004

Chair: Ballot, Eric, École des Mines ParisTech

10:30 Designing Supply Chains with Sustainability Considerations

Chaabane, Amin, École de Technologie Supérieure

Ramudhin, Amar, École de Technologie Supérieure

Paquet, Marc, École de Technologie Supérieure

11:00 Green Supplier Evaluation using Fuzzy Axiomatic Design Based Decision Analysis

Arsenyan, Jbid, Bahcesehir University

Buyukozkan, Gulcin, Galatasaray University

11:30 The Reduction of Greenhouse Gas Emissions from Freight Transport by Merging Supply Chains

Pan, Shenle, École des Mines de Paris
Ballot, Eric, École des Mines de Paris
Fontane, Frédéric, École des Mines de Paris

1C Special session: Distributed and Collaborative Projects: Theoretical Perspectives and Practical Challenges

Location: M-2201
Chair: Bourgault, M, École Polytechnique

10:30 Investigation of Client Influence on Collaborative and Distributed Project Success

Bourgault, Mario, École Polytechnique de Montréal
Daoudi, Jaouad, École Polytechnique de Montréal
Drouin, Nathalie, Université du Québec à Montréal

11:00 Planning of International Projects with Material Constraints

Pellerin, Robert, École Polytechnique de Montréal
Sadr, Javd, École Polytechnique de Montréal
Guèvremont, Maryse, École Polytechnique de Montréal
Rousseau, Louis-Martin, École Polytechnique de Montréal

1D Special session: Holonic and Intelligent Manufacturing Control

Location: M-2203
Chairs: Thomas, André, CRAN – ENSTIB
Trentesaux, Damien, University of Valenciennes

10:30 Enhancing Genetic Algorithm with Predator Mechanisms for On-Line Optimization

Pellerin, Robert, École Polytechnique de Montréal
Saenz De Ugarte, Benoit, École Polytechnique de Montréal
Artiba, Abdelhakim, Institut Supérieur de Mécanique Paris

11:00 Open-Control Paradigm: Holonic Implementation

Raileanu, Silviu, University Politechnica of Bucarest
Berger, Thierry, University of Valenciennes
Trentesaux, Damien, University of Valenciennes
Locationz, Yves, University of Valenciennes
Borangiu, Theodor, University Politechnica of Bucarest

11:30 Reduction of Product Driven System Emulation Models Based on Neural Network: Impact of Discrete Data

Thomas, Philippe, Université Nancy
Thomas, André, Université Nancy
Suhner, Marie-Christine, Université Nancy

2A Innovation Concepting and Launching

Location: M-2002

Chair: Fortin, Clément, École Polytechnique de Montréal

13:15 Methodology for the Implementation of the Model-Based Definition Approach

Quintana, Virgilio, École de technologie supérieure

Rivest, Louis, École de technologie supérieure

Pellerin, Robert, École Polytechnique de Montréal

Venne, Frederick, École de technologie supérieure

13:45 Controlling Ideas and Concepts Generation Stage for a Better Management of Innovation Portfolio: Analysis of the Fugle® Methodology's Funnel

Nhim, Visna, Institut de Recherche en Communications et en Cybernétique de Nantes

Rauffet, Philippe, Institut de Recherche en Communications et en Cybernétique de Nantes

Da Cunha, Catherine, Institut de Recherche en Communications et en Cybernétique de Nantes

Bernard, Alain, École Centrale de Nantes

Uys, Wilhelm, Indutech, Stellenbosch University

Louw, Louis, Indutech, Stellenbosch University

Du Preez, Nick, Indutech, Stellenbosch University

14:15 Identification of Problem types During Production Ramp-Up

Surbier, Laurène, G-SCOP Laboratory

Alpan, Gülgün, G-SCOP Laboratory

Blanco, Eric, G-SCOP Laboratory

14:45 Iterative Product Configuration with Fuzzy Logic

Barajas, Marco, École Polytechnique de Montréal

Agard, Bruno, École Polytechnique de Montréal

2B Special session: Reverse Logistics

Location: M-2004

Chair: Jaber, Mohamad, Ryerson University

13:15 Safety Management in Hazardous Materials Logistics: A Survey of Firms' Practices

Leroux, Marie-Hélène, École Polytechnique de Montréal

de Marcellis-Warin, Nathalie, École Polytechnique de Montréal

Trépanier, Martin, École Polytechnique de Montréal

13:45 Influence of Product Return Lead-Time on Inventory Control

Zerhouni, Hichem, Laboratoire G-SCOP

Gayon, Jean-Philippe, Laboratoire G-SCOP

Frein, Yannick, Laboratoire G-SCOP

14:15 A Simple Reverse Logistics Model with Entropy and Exergy costs

Jaber, Mohamad Y., Ryerson University
Rosen, Marc A., University of Ontario Institute of Technology
El Saadany, Ahmed, Ryerson University

14:45 Lot Sizing for Imperfect Production-Remanufacturing Processes with Quality Corrective Interruptions and Improvements

El Saadany, Ahmed, Ryerson University
Jaber, Mohamad Y., Ryerson University

2C Project Resource Allocation

Location: M-2201
Chair: Elmaghraby, Salah, North Carolina State University

13:15 The Optimal Resource Allocation in Stochastic Activity Networks via Continuous Time Markov Chains

Elmaghraby, Salah E., North Carolina State University
Rudolph, Adam J., Lenovo, Inc.

13:45 A Memetic Algorithm for the Resource Constrained Project Scheduling Problem

Moukrim, Aziz, Université de Technologie de Compiègne
Carlier, Jacques, Université de Technologie de Compiègne
Xu, Huang, Université de Technologie de Compiègne
Bouly, Hermann, Université de Technologie de Compiègne

14:15 Quantity Oriented Resource Allocation Strategy on Multiple Resources Projects under Stochastic Conditions

Tereso, Anabela, University of Minho
Araújo, Madalena, Minho University
Moutinho, Rui, University of Minho
Elmaghraby, Salah E., North Carolina State University

14:45 Duration Oriented Resource Allocation Strategy on Multiple Resources Projects under Stochastic Conditions

Tereso, Anabela, University of Minho
Araújo, Madalena, Minho University
Moutinho, Rui, University of Minho
Elmaghraby, Salah E., North Carolina State University

2D Special session: Metaheuristics and Simulation Applied to Goods and Services Production Systems (1/2)

Location: M-2203

Chairs: Roux, Olivier, Facultés Universitaires Catholiques de Mons
Duvivier, David, Université du Littoral

13:15 Importance of Simulation in Manufacturing

Hosseinipour, Farhad, Islamic Azad University of Zahedan
Hajihosseini, Hamid, Islamic Azad University of Zahedan

13:45 Using Value at Risk as a Performance Measurement for Inventory Policies in a Manufacturing Environment

Diego Fernando, Manotas Duque, Universidad del Valle
Hector H, Toro Díaz, Universidad Javeriana

14:15 Modeling of Complex Production Systems and its Simulator for Optimal Design

Abu Qudeiri, Jaber, Philadelphia University
Al-Momani, Khalid, Jordan University of Science and Technology
Khadra, Fayiz Abu, Université du Québec à Trois-Rivières
Ghazal, Osama, Philadelphia University
Jamali, Anouar, Université du Québec à Trois-Rivières
Ramli, Rizaudin, The National University of Malaysia

14:45 Optimization of Preventive Maintenance through a Combined Maintenance-Production Simulation Model

Roux, Olivier, Facultés Universitaires Catholiques de Mons
Duvivier, David, Université du Littoral
Quesnel, Gauthier, Institut national de la recherche agronomique
Ramat, Eric, Université du Littoral

3A Special session: Product Lifecycle Management

Location: M-2002

Chair: Fortin, Clément, École Polytechnique de Montréal

15:30 A Model of a Complex New Product Development Process

Suss, Sam, McGill University
Thomson, Vincent, McGill University

16:00 Information Structures and Processes to Support Data Exchange between Product Development and Resource Planning Systems

Huet, Greg, École Polytechnique de Montréal
Fortin, Clément, École Polytechnique de Montréal
McSorley, Grant, École Polytechnique de Montréal
Toche, Boris, École Polytechnique de Montréal

16:30 Potential use of PLM and ERP as Environmental Data Sources for LCA: A Prospective Literature Review

Muller, Eric, École Polytechnique de Montréal
Pellerin, Robert, École Polytechnique de Montréal
Margni, Manuele, École Polytechnique de Montréal
Becaert, Valerie, École Polytechnique de Montréal

17:00 Interface Management for Complex Products

Thomson, Vincent, McGill University
Rahmani, Keyvan, McGill University

3B Special session: Collaborative Planning of Value Network

Location: M-2004

Chairs: D'Amours, Sophie, Université Laval
Rønnqvist, Mikael, Norwegian School of Economics and Business Administration

15:30 A Review on Collaborative Logistics

Audy, Jean-Francois, Université Laval
D'Amours, Sophie, Université Laval
Lehoux, Nadia, École Polytechnique de Montréal
Rønnqvist, Mikael, Norwegian School of Economics and Business Administration

16:00 A Decision Support Framework for Manufacturing Improvement and Relocation Prevention in Thailand: Supply Chain Perspective

Reeveerakul, Napaporn, Chiang Mai University
Derrouiche, Ridha, Université de Lyon (Lumière Lyon 2)
Chakpitak, Nopasit, Chiang Mai University
Ouzrout, Yacine, Université de Lyon (Lumière Lyon 2)
Harnpornchai, Napat, Chiang Mai University
Bouras, Abdelaziz, Université de Lyon

16:30 Proposition of a Framework for Managing the Supply Chain Risks – Application to the Mining Industry in Chile

Di Martinelly, Christine, Universidad Andres Bello
Bronfman, Nicolas, Universidad Andres Bello

17:00 Organizational Competencies and Competitive Advantage: A Mass Customization Strategy for the Furniture Industry

Moreira, Matheus P., Université Laval
Azouzi, Riadh, Université Laval
D'Amours, Sophie, Université Laval
Beauregard, Robert, Université Laval

3C Project Evaluation and Selection

Location: M-2201

Chair: Nielsen, Peter, Aalborg University

15:30 Decision Support For Multi-Criteria Project Portfolio Evaluation

Tomczuk-Pirog, Izabela, Aalborg University

Nielsen, Peter, Aalborg University

Steger-Jensen, Kenn, Aalborg University

16:00 Optimal Project Selection under Uncertainty

Rivera, Leonardo, Universidad Icesi

Manotas Duque, Diego, Universidad del Valle

16:30 Activity on Arc Network Graphic Editor

Tereso, Anabela, University of Minho

Cardoso, João Paulo, University of Minho

Cabral, José Pedro, University of Minho

17:00 Towards an Efficient Structural Analysis of Colored Petri Nets

Bouali, Mohamed, Université de Technologie de Compiègne

Barger, Pavol, Université de Technologie de Compiègne

Schon, Walter, Université de Technologie de Compiègne

3D Special session: Metaheuristics and Simulation applied to Goods and Services Production Systems (2/2)

Location: M-2203

Chairs: Roux, Olivier, Facultés Universitaires Catholiques de Mons

Duvivier, David, Université du Littoral

15:30 Simultaneous Scheduling of Machines and Automated Guided Vehicles: Graph Modelling and Resolution

Lacomme, Philippe, Université Blaise Pascal

Larabi, Mohand, Université Blaise Pascal

Tchernev, Nikolay, Université d'Auvergne

16:00 A Multiple Objective Optimization Used in Maintenance System

Hani, Yasmina, Université Paris 8

El Mhamedi, Abderrahman, Université Paris 8

16:30 A Metaheuristic for the Vehicle Routing Problem with Time Windows

Belfiore, Patrícia, University of Sao Paulo

Yoshizaki, Hugo, University of Sao Paulo

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4A Strategic System Modeling

Location: M-2002

Chair: Eisner, Howard, George Washington University

08:15 A Framework for Context-Aware Business Processes Modelling

Boukadi, Khouloud, Division for Industrial Engineering and Computer Sciences, ENSM

Chaabane, Amin, École de Technologie Supérieure

Vincent, Lucien, Division for Industrial Engineering and Computer Sciences, ENSM

08:45 System Design, Architecting and Heuristics

Eisner, H., George Washington University

09:15 How Quality Management Contributes to Profitability in a Strategy-Focused Organization

Monire, Jalili, Mapna Group

Kamran, Rezaei, University of Tehran

4B Special session : Intralogistic Design and Optimization

Location: M-2004

Chair: Langevin, André, École Polytechnique de Montréal

08:15 A Case Analysis of an Optimization of Handling Equipment in a Container Terminal

Cheung, Bernard, École Polytechnique de Montréal

Ngai, Eric W.T., The Hong Kong Polytechnic University

08:45 Preliminaries on AMHS: Lessons learned

Temponi, Cecilia, Texas State University

Jimenez, Jesus, Texas State University

Khan, Jibran, Texas State University

09:15 Apology of the Risk as the Key to Drive the Real-Estate

Taillandier, Franck, Université de Savoie

Sauce, Gérard, Université de Savoie

Bonetto, Régis, Centre scientifique et technique du bâtiment

4C **Special session: Condition-based Maintenance (1/2)**

Location: M-2201

Chair: Yacout, Soumaya, École Polytechnique de Montréal

08:15 **Accuracy and Robustness of Decision Making Techniques in Condition Based Maintenance**

Orth, Philippe, École Polytechnique de Montréal

Yacout, Soumaya, École Polytechnique de Montréal

Adjengue, Luc, École Polytechnique de Montréal

08:45 **"Rogue" Components - Their Effect and Control**

Carroll III, Thomas H., NetJets Inc.

09:15 **LAD-CBM, New Data Processing Tool for Diagnosis and Prognosis in Condition-based Maintenance**

Abderrazak, Bennane, École Polytechnique de Montréal

Yacout, Soumaya, École Polytechnique de Montréal

4D **Special session: Order Promising, Scheduling and Fullfilment**

Location: M-2203

Chair: Framinan, Jose M., University of Seville

08:15 **Ant-Tabu Heuristic for Real-Time Emergency Vehicle Dispatching**

Ibri, Sarah, Université Hassiba Benbouali de Chlef

Nourelfath, Mustapha, Université Laval

Drias, Habiba, Université des sciences et de la technologie Houari Boumediene

08:45 **A Pseudo-Polynomial Time Algorithm for the UET Two-Machine Open-Shop with Two Distinct Time Delays**

Alix, Munier-Kordon, Université Pierre et Marie Curie

Djamal, Rebaine, Université du Québec à Chicoutimi

09:15 **Managing Resources for Order Promising in Available-To-Promise (ATP) Systems: A Simulation Study**

Framinan, Jose M., University of Seville

5A Special session: Health Care Networks and Supply Chains

Location: M-2002

Chairs: El-Darzi, Elia, University of Westminster
Meskens, Nadine, Catholic University of Mons

13:15 Performance Analysis of Ambulatory Services using Discrete-Event Simulation

Fei, Hongying, Catholic University of Mons
Meskens, Nadine, Catholic University of Mons
El-Darzi, Elia, University of Westminster

13:45 A Model for Scheduling Drug Deliveries in a French Homecare

Ben Bachouch, Rym, Institut National des Sciences Appliquées de Lyon
Guinet, Alain, Institut National des Sciences Appliquées de Lyon
Hajri-Gabouj, Sonia, Institut National des Sciences Appliquées et de Technologie

5B Special session: Facility Logistic Design and Optimization

Location: M-2004

Chair: Langevin, André, École Polytechnique de Montréal

13:15 Scheduling Inbound Trucks at a Cross-Docking Facility: A Multi-objective and a Hierarchical Approach

Golias, Mihalis, Memphis University
Saharidis, Georgios, Rutgers The state University of NJ
Boile, Maria, Rutgers The state University of NJ
Theofanis, Sotiris, Rutgers The state University of NJ
Zhang, Ti, Rutgers The state University of NJ

13:45 A real-time resource and pickup route management system for warehouse operations

Poon, Tak Chun, The Hong Kong Polytechnic University
Choy, King Lun, The Hong Kong Polytechnic University

14:15 Impact of Semi-Trailer Scheduling on Cross Docking Platform Efficiency

Maknoon, Youssef, École Polytechnique de Montréal
Baptiste, Pierre, École Polytechnique de Montréal

5C Special session: Condition-based Maintenance (2/2)

Location: M-2201

Chair: Yacout, Soumaya, École Polytechnique de Montréal

13:15 Condition Based Maintenance Optimization Considering Multiple Objectives

Tian, Zhigang, Concordia University
Lin, Daming, University of Toronto
Wu, Bairong, Concordia University

13:45 Parameter Estimation for Condition Based Maintenance with Proportional Hazard Model

Ghasemi, Alireza, École Polytechnique de Montréal
Yacout, Soumaya, École Polytechnique de Montréal
Ouali, M-Salah, École Polytechnique de Montréal

14:15 Minor Maintenance Actions and their Impact on Diagnostic and Prognostic CBM Models

Montgomery, Neil, University of Toronto
Banjevic, Dragan, University of Toronto
Jardine, Andrew K.S., University of Toronto

14:45 Design of Optimum Component Test Plans while Considering Expected System Lifetime

Yamangil, Emre, Galatasaray University
Feyzioglu, Orhan, Galatasaray University
Altinel, İ. Kuban, Bogazici University
Ozekici, Suleyman, Koc University

5D Operations Planning & Scheduling

Location: M-2203
Chair: Riane, Fouad, Louvain School of Management

13:15 Scheduling under energy constraints

Artigues, Christian, LAAS-CNRS, Université de Toulouse
Hait, Alain, Université de Toulouse, ISAE
Lopez, Pierre, LAAS-CNRS, Université de Toulouse

13:45 Heuristic Approaches for Integrated Production and Distribution Planning

Strack, Géraldine, Université Catholique de Louvain
Fortz, Bernard, Université Libre de Bruxelles
Riane, Fouad, Université Catholique de Mons

14:15 A Synchronized Model for Ordering, Production and Shipments Lot Sizing in a Multi Echelon Supply Chain

Ben-Daya, Mohammed, King Fahd University of Petroleum and Minerals
As'ad, Rami, King Fahd University of Petroleum and Minerals

13:15 Student Competition

Location: L-2708 and M-2204

6A Special session: Health Care System Evaluation and Improvement

Location: M-2002

Chairs: Chaabane, Sondes, Université de Valenciennes

Tahon, Christian, Université de Valenciennes et du Hainaut-Cambrésis

15:30 Continuous Quality Improvement in hospital organizations: toward a new way of thinking

Artiba, Abdelhakim, Supméca Paris

Delvisakke, Christian, Faculté Polytechnique de Mons

El Hiki, Lahcen, Faculté Polytechnique de Mons

Tahon, Christian, Université de Valenciennes et du Hainaut-Cambrésis

16:00 Analogy Between Medication-Use Process and Assembly System

Huet, Jean-Charles, Institut Français de Mécanique Avancée

Kouiss, Khalid, Institut Français de Mécanique Avancée

Paris, Jean-Luc, Institut Français de Mécanique Avancée

Gourgand, Michel, Institut Supérieur d'Informatique de Modélisation et de leurs Applications

16:30 Can Maturity Model be Useful for the Evaluation and Improvement of Health Organizations? Concepts and Case Studies

Rakotondranaivo, Auguste, Institut National Polytechnique de Lorraine

Klein, Isabelle, Regional Oncology Network in Lorraine

Grandhaye, Jean-Pierre, Institut National Polytechnique de Lorraine

6B Special session: Lean and Agile Integrated Supply Chains

Location: M-2004

Chair: Benyoucef, Lyes, Institut National de Recherche en Informatique et en Automatique

15:30 Some Issues and Perspectives for Agile Integrated Long Supply Chain Management

Benyoucef, Lyes, Institut National de Recherche en Informatique et en Automatique

Jain, Vipul, Institut National de Recherche en Informatique et en Automatique

16:00 Flexibility, Inside the Process of Production—A Study on Taiwan's Precision Machinery Industry

Hsiang-Yi, Chen, Feng Chia University

Wen-Hsiang, Lai, Feng Chia University

16:30 Towards an Agile Supply Chain: Lessons Learned from Humanitarians

Charles, Aurélie, École des Mines d'Albi

Lauras, Matthieu, École des Mines d'Albi

Van Wassenhove, Luk N., INSEAD

6C Special session: Multi-State System Reliability (1/2)

Location: M-2201

Chair: Nourelfath, Mustapha, Université Laval

15:30 Service Reliability Estimation of Degrading Failure Modes: Wheelchair Batteries

Mohammadian, S. Hossein, Université Laval

Aït-Kadi, Daoud, Université Laval

Routhier, Francois, Université Laval

16:00 Simultaneous Prediction Limits on Observations in Future Samples with Applications

Nechval, Nicholas, University of Latvia

Nechval, Konstantin, Transport and Telecommunication Institute

Purgailis, Maris, University of Latvia

Berzins, Gundars, University of Latvia

Danovich, Vadim, University of Latvia

Lipman, Philip, University of Latvia

16:30 Performance Evaluation of Series Production Lines with Multiple Failure Modes

Belmansour, Ahmed-Tidjani, Université Laval

Nourelfath, Mustapha, Université Laval

6D Production & Inventory System Control

Location: M-2203

Chair: Hajji, Adnene , École Polytechnique de Montréal

15:30 Analogy Process in Real-time Control of Parts Input for Flexible Production System

Rizauddin, Ramli, The National University of Malaysia

Yamamoto, Hidehiko, Gifu University,

Abu Qudeiri, Jaber, Philadelphia University

16:00 Inventory Control for Perishable Products and the Use of a New Technology

Kouki, Chaaben, École Centrale Paris

Sahin, Evren, École Centrale Paris

Jemai, Zied, École Centrale Paris

Dallery, Yves, École Centrale Paris

16:30 Production Control of Unreliable Manufacturing Systems Producing Defective Items

Mhada, Fatima, École Polytechnique de Montréal
Hajji, Adnene, École Polytechnique de Montréal
Malhamé, Roland, École Polytechnique de Montréal
Pellerin, Robert, École Polytechnique de Montréal
Gharbi, Ali, École de technologie supérieure

15:30 Student Competition

Location: L-2708 and M-2204

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7A Special session: Health Care Service Modeling

Location: M-2002

Chair: Augusto, Vincent, École des Mines de Saint-Étienne

08:15 Recovery Beds and Blocking in Stochastic Operating Theatres

Roland, B., Université catholique de Mons

Cordier, J.-P., Université catholique de Mons

Tancrez, J.-S., Université catholique de Louvain

Riane, F., Université catholique de Mons

08:45 Disaster Preparedness in Hospitals: Sizing Critical Resources

Nouaouri, Issam, Université d'Artois

Hajri-Gabouj, Sonia, Institut National des Sciences Appliquées et de Technologie

Dridi, Najoua, École Nationale d'Ingénieurs de Tarbes

Nicolas, Jean Christophe, Université d'Artois

09:15 Redesigning the Neurovascular Unit of a Health Care Complex Using Simulation

Augusto, Vincent, École des Mines de Saint-Étienne

Xie, Xiaolan, École des Mines de Saint-Étienne

7B Special session on Data Mining and Decision Systems in Demand and Supply Chains

Location: M-2004

Chair: Agard, Bruno, École Polytechnique de Montréal

08:15 Value Chains Simulator, a Tool for Value Analysis of Manufacturing Enterprise Processes

Bosch - Mauchand, Magali, Université de Technologie de Compiègne

Siadat, Ali, École Nationale Supérieure d'Arts et Métiers

Perry, Nicolas, Université Bordeaux

Bernard, Alain, École Centrale de Nantes

08:45 Supply Web Mapper

Montreuil, Benoît, Université Laval

Labarthe, Olivier, Université Laval

Hakimi, Driss, Université Laval

Larcher, Anne, Université Laval

Audet, Mathieu, Université Laval

09:15 Decision Support System Based on Socio-Demographic Segmentation and Distribution Channel Analysis in the US Furniture Market

Le, Thi Thu Hoa, École Polytechnique de Montréal

Agard, Bruno, École Polytechnique de Montréal,

Deveault, Stéphane, Canadel Furniture

7C Special session: Multi-State System Reliability (2/2)

Location: M-2201

Chair: Nourelfath, Mustapha, Université Laval

08:15 Reliability Optimization of Series-Parallel Multi-State Systems Using Heuristic Search

Nourelfath, Mustapha, Université Laval

Ouzineb, Mohammed, Université de Montréal

Gendreau, Michel, Université de Montréal

08:45 Preventive Maintenance and Tactical Production Planning in Multi-State Systems

Nourelfath, Mustapha, Université Laval

Fitouhi, Mohamed-Chahir, Université Laval

09:15 Optimal Performance of a Multi-State System under an Inspection and Repair Policy

Soro, Isaac W., Université Laval

Aït-Kadi, Daoud, Université Laval

Nourelfath, Mustapha, Université Laval

7D Production Planning & Scheduling

Location: M-2203

Chair: Rönnqvist, Mikael, Norwegian School of Economics and Business Administration

08:15 Formulation for Less Master Production Schedule Instability under Rolling Horizon

Herrera, Carlos, Université Nancy

Thomas, André, Université Nancy

08:45 A Modified Branch-and-Bound Algorithm for Production Planning in Steel Rolling Mills

As'ad, Rami A. M., Concordia University

Demirli, Kudret, Concordia University

09:15 A New Method for Robustness in Rolling Horizon Planning

Rönnqvist, Mikael, Norwegian School of Economics and Business Administration

Bredström, David, Norwegian School of Economics and Business Administration

8A Special session: Human aspects in Planning and Decision Systems

Location: M-2002

Chairs: Grabot, Bernard, École Nationale d'Ingénieurs de Tarbes
Mayere, Anne, École Nationale d'Ingénieures de Tarbes
Waefler, Toni, University of Applied North Western Switzerland

10:00 SME and Planning in Supply Chains: a Socio-technical View

Grabot, Bernard, École Nationale d'Ingénieurs de Tarbes
Mayere, Anne, École Nationale d'Ingénieures de Tarbes

10:30 Comprehension of Uncertainties in Decision Support Systems

Robert, Jean-Marc, École Polytechnique de Montréal
Duquet, Jean-Rémi, Lockheed Martin Canada
Atoyan, Hasmik, École Polytechnique de Montréal

11:00 How to Reach High Level Supplier Organizational Interoperability within the Supply Chain

Marsina, Stefan, University of Economics in Bratislava

8B Special session: Logistic Network and Supply Chain Design and Optimization

Location: M-2004

Chair: Langevin, André, École Polytechnique de Montréal

10:00 Designing Hub and Spoke Transportation Systems for a Competitive Environment

Campbell, James F., University of Missouri
Sasaki, Mihiro, Nanzan University
Krishnamoorthy, Mohan, Monash University
Ernst, Andreas, CSIRO Mathematical and Information Sciences

10:30 Product and Supply Chain Design using a Taboo Search

El Hadj Khalaf, Radwan, Groupe Grenoble INP
Agard, Bruno, École Polytechnique de Montréal
Penz, Bernard, Groupe Grenoble INP

11:00 Finding "Staff Acceptable" Routes for Road Network Monitoring

Trépanier, Martin, École Polytechnique de Montréal
Langevin, André, École Polytechnique de Montréal
Lemarbre, Simon, AbitibiBowater Inc.
Ilic, Nikola, École Nationale Supérieure des Arts et Métiers

11:30 **A Contribution to Supply Chain Design under Uncertainty**
Kissani, Ilham, Université Laval
Kettani, Ossama, Modellium Inc.
Aït-Kadi, Daoud, Université Laval
Oral, Muhittin, Sabanci University

8C **Special session: Management and Optimisation of Maintenance Activities**

Location: M-2201
Chair: Allaoui, Hamid, Université d'Artois

10:00 **A Study on Factors Determining Bow Level of Stiles in a Sash**
Huang, Luke, University of North Dakota

10:30 **Simulation Aided Jointly Scheduling n Jobs and Preventive Maintenance on a Single Machine Subject to Breakdowns**

Allaoui, Hamid, University of Artois
Iassinovski, Sergui, Multitel
Benmansour, Rachid, Institut Supérieur de Mécanique de Paris
Artiba, Abdelhakim, Institut Supérieur de Mécanique de Paris
Pellerin, Robert, École Polytechnique de Montréal

11:00 **Bivariate Renewal Function Computational Algorithm**
Chelbi, Anis, École Supérieure des Sciences et Techniques de Tunis
Soussi, Mohamed Amine, École Polytechnique de Tunisie
Aït-Kadi, Daoud, Université Laval

8D **Special session: Supply Chain Operations Planning in Natural Resources**

Location: M-2203
Chairs: Frayret, Jean-Marc, École Polytechnique de Montréal
Rousseau, Louis-Martin, École Polytechnique de Montréal

10:00 **A Heuristic to Solve the Weekly Log-Truck Scheduling Problem**
Rousseau, Louis-Martin, École Polytechnique de Montréal
Gendreau, Michel, Université de Montréal
El Hachemi, Nizar, École Polytechnique de Montréal

10:30 Evaluating Tactical Planning and Control Policies for a Softwood Lumber Supply Chain through Agent-Based Simulations

Santa-Eulalia, Luis Antonio, Université Laval
Aït-Kadi, Daoud, Université Laval
D'Amours, Sophie, Université Laval
Frayret, Jean-Marc, École Polytechnique de Montréal
Lemieux, Sébastien, Université Laval

11:00 A Multi-Stage Stochastic Programming Approach for Sawmill Production Planning with Random Yield and Demand

Kazemi Zanjani, Masoumeh, Université Laval
Aït-Kadi, Daoud, Université Laval
Nourelfath, Mustapha, Université Laval

11:30 Robust Sawmill Production Planning

Kazemi Zanjani, Masoumeh, Université Laval
Nourelfath, Mustapha, Université Laval
Aït-Kadi, Daoud, Université Laval

9A Special session: Human Aspects in Scheduling and Routing

Location: M-2002

Chairs: Grabot, Bernard, École Nationale d'Ingénieurs de Tarbes
Mayere, Anne, École Nationale d'Ingénieures de Tarbes
Waefler, Toni, University of Applied North Western Switzerland

13:15 Scheduling Identical Parallel Machines and Operators within an End Job Changing Mode

Zouba, Mohammed, École Polytechnique de Montréal
Baptiste, Pierre, École Polytechnique de Montréal
Rebaine, Djamel, Université du Québec à Chicoutimi

13:45 An Efficient Algorithm for the Multi-Mode Resource Constrained Project Scheduling Problem with Resource Flexibility

Arroub, Marouane, Université de Nantes
Kadrou, Youness, Université de Nantes
Najid, Najib, Université de Nantes

14:15 An Interdisciplinary Method for a Generic Vehicle Routing Problem Decision Support System

Gacias, Bernat, Laboratoire d'Analyse et d'Architecture des Systèmes

14:45 **A New Human-Machine System for Group Sequencing**
Pinot, Guillaume, Institut de Recherche en Communications et en Cybernétique de Nantes
Mebarki, Nasser, Institut de Recherche en Communications et en Cybernétique de Nantes
Hoc, Jean-Michel, Institut de Recherche en Communications et en Cybernétique de Nantes

9B **Demand and Supply Chain Analysis**

Location: M-2004
Chair: Tomczuk-Pirog, Izabela, Aalborg University

13:15 **Framework and Interdependencies Analysis for Customer Order Behavior in the MTO-MTS Environment**
Steger-Jensen, Kenn, Aalborg University
Nielsen, Peter, Aalborg University
Tomczuk-Pirog, Izabela, Aalborg University

13:45 **Synergy of Embedding Theorem and Optimized Neural Network Using Taguchi's Design of Experiment in Time Series Forecasting**
Ardalani-Farsa, Muhammad, Ryerson University
Zolfaghari, Saeed, Ryerson University

14:15 **Investigating the Implicit Assumptions of the Hierarchical Demand Planning Approach**
Nielsen, Peter, Aalborg University
Steger-Jensen, Kenn, Aalborg University
Hvolby, Hans, Department of Production, Aalborg University
Tomczuk-Pirog, Izabela, Aalborg University

14:45 **Market Attractiveness Index: A Decision Analysis Technique for Market Assessment**
Araújo, Madalena, Minho University
Amaral, Antonio, Minho University

9C **Special session: Integrated Production and Maintenance Planning**

Location: M-2201
Chair: Najid, Najib, Université de Nantes

13:15 **Analytical Contributions to the Joint Optimization of Maintenance, Production and Subcontracting**
Cormier, Gilles, Université de Moncton
Rezg, Nidhal, Université de Metz

13:45 **IPROMMES: Integrating Production Operations and Maintenance into Manufacturing Execution System**

Artiba, Abdelhakim, Institut Supérieur de Mécanique de Paris
Allaoui, Hamid, University of Artois
Pellerin, Robert, École Polytechnique de Montréal
Oussous, Noureddine, University Lille 1

14:15 **Joint Maintenance and Production Planning of Manufacturing Systems Subject to Defective Products**

Njike, Achille N., École de Technologie Supérieure
Pellerin, Robert, École Polytechnique de Montréal
Kenne, Jean-Pierre, École de Technologie Supérieure

14:45 **An Integrated Hierarchical Production and Maintenance Planning Model**

Sitompul, Carles, Ghent University
Aghezzaf, El-Houssaine, Ghent University
Najid, Najib, Université de Nantes

9D **Ordering and Inventory Policy**

Location: M-2203
Chair: Dolgui, Alexandre, École des Mines de Saint-Étienne

13:15 **Optimal Spare Provisioning under Block-Replacement Policy: Simulation Modelling Based Approach**

Dhouib, Karem, École Supérieure des Sciences et Techniques de Tunis
Gharbi, Ali, École de Technologie Supérieure,
Belghagi, Mouhammed, École Supérieure des Sciences et Techniques de Tunis

13:45 **Choice of an Ordering Strategy Taking Account of Risks about Customer Service Levels and On-Hand Inventories**

Moyaux, Thierry, Université de Lyon
Llerena, Daniel, Université Pierre-Mendès-France
Baboli, Armand, Université de Lyon

14:15 **Optimal Parameters for MRP with POQ Policy**

Louly, Mohamed-Aly, King Saud University
Dolgui, Alexandre, École des Mines de Saint-Étienne

14:45 **On the Performance of Periodic Inventory Control Policies**

Babai, M. Zied, Bordeaux Management School
Syntetos, Aris, University of Salford
Teunter, Ruud, Lancaster University

10A Special session: Advanced Statistical Process Control

Location: M-2002

Chair: Castagliola, Philippe, Université de Nantes

- 15:30 An Enhanced Control Chart for Start-Up Processes and Short Runs**
Capizzi, Giovanna, Università di Padova
Masarotto, Guido, Università di Padova
- 16:00 A S2 EWMA Control Chart Based on a Johnson's Type Transformation**
Castagliola, Philippe, Université de Nantes
Celano, Giovanni, University of Catania
Fichera, Sergio, University of Catania
Pavone, Luca, University of Catania
- 16:30 Constrained Economic Design of a SPC Procedure in a Manual Multi-Task Workstation**
Celano, Giovanni, University of Catania
De Magalhaes, Maysa S., Universidade do Estado do Rio de Janeiro
Costa, A.F.B., Universidad Estadual Paulista
Fichera, Sergio, University of Catania
- 17:00 On the Design of Shewhart Control Charts Monitoring Dispersion in Processes with Random Shifts**
Celano, Giovanni, University of Catania
Castagliola, Philippe, Université de Nantes
Costa, Antonio, University of Catania
Fichera, Sergio, University of Catania

10B Supply Chain Performance Optimization

Location: M-2004

Chair: Lamouri, Samir, Institut Supérieur de Mécanique de Paris

- 15:30 Inaccuracies within a Decentralized Supply Chain: A General Framework**
Rekik, Yacine, EMLYON Business School
Jemai, Zied, École Centrale Paris
- 16:00 A Framework for Analysing Supply Chain Performance Evaluation Models**
Estampe, Dominique, Bordeaux Management School
Brahim-Djelloul, Sakina, Institut National de Commerce Alger
Lamouri, Samir, Laboratoire d'Ingénierie des Systèmes Mécaniques et des Matériaux
Paris, Jean-Luc, Institut Français de Mécanique Avancée
- 16:30 A Framework for Financial Supply Chain Optimization**
Fenies, Pierre, Université d'Auvergne
Lacomme, Philippe, Université Blaise Pascal
Tchernev, Nikolay, Université d'Auvergne

17:00 Designing Supply Contract by a Manufacturer, Regarding to Customer Oriented Production Systems

Nookabadia, Ali Shahandeh, Isfahan University of Technology
Nosoohi, Iman, Isfahan University of Technology

10C Special session: Machinery Health Monitoring, Diagnostics and Prognostics

Location: M-2201

Chair: He, David, University of Illinois at Chicago

15:30 Fault Features Extraction for Bearing Prognostics

Li, Ruoyu, The University of Illinois at Chicago
Sopon, Ponrit, The University of Illinois at Chicago
He, David, The University of Illinois at Chicago

16:00 Development and Evaluation of Prognostics Algorithms for Driveshafts

He, David, The University of Illinois at Chicago
Wua, Shenliang, The University of Illinois at Chicago
Bechhofer, Eric, Goodrich Sensors and Integrated Systems

16:30 Application of the Automated Condition Based Maintenance Checking System for Aircrafts

Imadabathuni, Mahindra, The University of Illinois at Chicago
Joshi, Pradnya, The University of Illinois at Chicago
He, David, The University of Illinois at Chicago
Al-Kateb, Mohammed, The University of Vermont
Bechhoefer, Eric, Goodrich Sensors and Integrated Systems

10D Production & Inventory Modeling

Location: M-2203

Chair: Rezg, Nidhal, Université de Metz

15:30 Genetic Algorithm Optimization of a Two-Echelon Supply Chain Network

Fahimnia, Behnam, University of South Australia
Luong, Lee, University of South Australia
Marian, Romeo, University of South Australia

16:00 Simulation by Petri net for the one machine problem with temporal functions of polynomial type

Guegnard, Frederic, IUT-LISA
Bousseau, Frederic, IUT-LISA
Bourcerie, Marc, IUT-LISA

16:30 **A Generalized Management Strategy for a Single Vendor Single Buyer System with a Constraint on the Transport Capacity**

Rezg, Nidhal, Université Paul Verlaine – Metz

Yedes, Yesser, Université Paul Verlaine – Metz

Chelbi, Anis, Centre de productique intégrée du Québec

17:00 **A Simple Three Level Supply Chain with Defective Items**

Khan, Mehmood, Ryerson University

Jaber, Mohamad Y., Ryerson University