

		sessions TH-A	
08:00 am - 09:40 am	TH-A-1	Cutting and Scheduling (room A001)	<p>Metaheuristics for Operations Management in Intelligent Manufacturing Systems and Logistics Chairs: Christophe Varnier, Farouk Yalaoui</p> <p>(152) The Integrated Production and Transportation Scheduling Problem Based on a GRASPxELS Resolution Scheme (Lacomme, Philippe; Moukrim, Aziz; Quilliot, Alain; Vinot, Marina)</p> <p>(178) Three Metaheuristics Improved by a Mapping Method (autuori, Julien; Hnaien, Faïcel; Yalaoui, Farouk)</p> <p>(341) Heuristics for Solving Flow Shop Scheduling Problem under Resources Constraints(Laribi, Imane; Yalaoui, Farouk; Sari, Zaki; BELKAID, Fayçal)</p> <p>(494) A Two-Phases Matheuristic for the Home Care Routing and Scheduling Problem (Decerle, Jérémy; Grunder, Olivier; Hajjam El Hassani, Amir; Barakat, Oussama)</p> <p>(566) A Decision-Making Approach for Job Shop Scheduling with Job Depending Degradation and Predictive Maintenance (Fitouri, Cyrine; Fnaiech, Nader; VARNIER, Christophe; Fnaiech, Farhat; Zerhouni, Noureddine)</p>
	TH-A-2	Integration of complex problems in the Supply Chain Management (room A002)	<p>Replenishment planning with price and lead time quotations under uncertainties Chairs: Faïcel Hnaien, Alexandre Dolgui</p> <p>(186) Approximate Queueing Network Analysis for Nonstationary Demand (Askin, Ronald; Jampani Hanumantha, Girish)</p> <p>(259) A Statistical Comparison of Two Safety Stock Replenishment Mechanisms in a Cyclic Stochastic IRP (Yadollahi, Ehsan; Aghezzaf, El-Houssaine; Raa, Davide; Paolucci, Massimo)</p> <p>(363) A Tabu Search Heuristic for an Integrated Production Distribution Problem with Clustered Retailers(Y. Boutarfa, A. Senoussi, N. K. Mouss, N. Brahimi)</p> <p>(573) Lead Time Quotation and Customer Utility in an M/M Type Base Stock System (Nakade, Koichi, Niwa Hiroki)</p>
	TH-A-3	Data mining and knowledge management (room C001)	<p>Operations Optimization in Cooperative and Cyber-physical Manufacturing Systems Chairs: Yuri Borisovitch, Dominique Gatti</p> <p>(81) Agent-based communication to map and exchange shop floor data between MES and material flow simulation based on the open standard CMSD (Frank, Timo; Romero-López, Mónica; Block, Christian; Morlock, Friedrich; Kühlenkötter, Bernd; Burges, Ulrich; Steinmetz, Waldemar)</p> <p>(154) Organizational Structure Optimization with the Questions-Criteria Hierarchy (Raikov, Alexander)</p> <p>(204) News from Rand Model Designer for Industry and Education (Kolesov, Yuri Borisovitch; Inikhov, Dmitry Borisovitch; Isakov, Andrey; Senichenkov, Yuri Borisovitch)</p> <p>(263) Increasing Flexibility of Modular Automated Material Flow Systems: A Meta Model Architecture (Aicher, Thomas; Regulin, Daniel; Schütz, Daniel; Lieberoth-Leden, Christian; Spindler, Markus; Guenther, Willibald A.; Vogel-Heuser, Birgit)</p> <p>(470) An Agent Based Intelligent Distributed Control Paradigm for Manufacturing Systems (Zhang, Haitao; Tang, Dunbing)</p>
	TH-A-4	Finance and chain value (room C104)	<p>System engineering for PSS Chairs: Emmanuel Caillaud, Alice Yalaoui</p> <p>(213) Classification and Mapping of PSS Evaluation Approaches (MOURTZIS, Dimitris; Doukas, Michael; Fotia, Sophia)</p> <p>(561) Pointing Out the Gap between Academic Research and Supporting Software Tools in the Domain of the Performance Measurement Management of Engineering Projects (ZHENG, Li; Baron, Claude; ESTEBAN, Philippe; XUE, Rui; Zhang Qiang; GOMEZ SOTOLE Karla Itzel)</p> <p>(565) Research Methodology for Systems Engineering: Some Recommendations (Caillaud, Emmanuel; Rose, Bertrand; GOEPP, Virginie)</p> <p>(579) Additive Manufacturing and PSS: A Solution Life-Cycle Perspective (Zanetti, Vittorio; Cavalieri, Sergio; Pezzotta Giuditta)</p> <p>(585) Process Modeling of Innovative Design Using Systems Engineering(Zhang, Qiang; Lerch, christophe; Baron, Claude; Filipas Deniaud, Ioana; Caillaud, Emmanuel)</p>
	TH-A-5	Manufacturing Systems Design (room C002)	<p>Design, Modeling and Optimal Control For Resilience and Sustainable Production Systems Under Uncertain Chair: Qing Chang, Noureddine Zerhouni, Jin Xiaoning</p> <p>(68) Production Loss Diagnosis and Prognosis Using Model-Based Data-Driven Method (Zou, Jing; Chang, Qing; Lei, Yong)</p> <p>(500) A Framework of Agile Data Management in Product Lifecycle Based on Rapid Data View Transformation (Qiao, Lihong, Pinxue, Zhibing, Yang Zhibing)</p> <p>(169) Option-Based Design for Resilient Manufacturing Systems(Jin, Xiaoning; Gu, Xi)</p> <p>(436) Data-Driven Method in Detecting CAN Network Intermittent Connection Fault (Zou, Jing; Chang, Qing; Zhang, Leiming; Lei, Yong)</p> <p>(473) Dynamic Aircraft Carrier Flight Deck Task Planning Based on HTN (Qi, Chao; Wang, Dan)</p>
	TH-A-6	Optimization and methods (room C102)	<p>Special Session on Advanced multi-criteria applications in manufacturing and logistics Chairs: Teghem, Jacques; Mohamed Dahane;</p> <p>(149) An Algorithm for a Bi-Objective Parallel Machine Problem with Eligibility, Release Dates and Delivery Times of the Jobsjobs (MATEO, Manel; Teghem, Jacques; Tuytens, Daniel)</p> <p>(172) A Bi-Objective Model to Address Disruptions on Unidirectional Road Networks (Huang, Yipeng; Santos, André Cynthia; Duhamel, Christophe)</p> <p>(461) Hybrid Heuristic to Minimize Machine's Unavailability Impact on Reconfigurable Manufacturing System Using Reconfigurable Process Plan (HADDOU BENDERBAL, HICHEM; DAHANE, Mohammed; Benyoucef, Lyes)</p> <p>(463) Fuzzy Multi-Objective Supply Chain Master Planning in a Wood and Paper Industry: A Case Study (Vafaenezhad, Taha; Tavakkoli-Moghaddam, Reza)</p> <p>(554) A Multi-Objective Multi-Supplier Sustainable Supply Chain with Deteriorating Products, Case of Cut Flowers (Sazvar, Zeinab; Sepehri, Mehran; BABOLI, Armand)</p>
	TH-A-7	Optimization for transportation and vehicle routing problems (room B101)	<p>Vehicle Routing Problems in City Logistics Chairs: Marie-Anage Manier, Haoxun Chen</p> <p>(56) Travel Itinerary Planning for Fractal-Like Multimodal Transportation Networks (Bocevicz, Grzegorz; Banaszak, Zbigniew; Nielsen, Izabela)</p> <p>(245) A Lagrangian Relaxation Approach to Combinatorial Exchange in Freight Logistics (Li, Yuan; Chen, Haoxun; Prins, Christian)</p> <p>(249) Scheduling Techniques for Relay Intercity Freightling (Dolgui, Alexandre; Bakhtadze, Natalia; Sabitov, Rustem; Smirnova, Gulnara; Sirazetdinov, Bulat; Sabitov, Shamil, Lototsky Vladimir)</p> <p>(301) An Adaptive Heuristic for the Capacitated Team Orienteering Problem (BEN-SAÏD, Asma; El-Hajj, Racha; Moukrim, Aziz)</p>
	TH-A-8	Reliability, maintenance and Safety (room B105)	<p>Advanced Manufacturing strategies to enhance safety, ergonomics and productivity in production systems Chairs : Fabio Fruggiero, Yassine Ouazene</p> <p>(250) Ergonomic Improvement through Job Rotations in Repetitive Manual Tasks in Case of Limited Specialization and Differentiated Ergonomic Requirements (Boenzi, Francesco; Facchini, Francesco; Digiesi, Salvatore; Mummolo, Giovanni)</p> <p>(358) A Hybrid Model for Human Error Probability Analysis (Petrillo, Antonella; De Felice, Fabio; Zomparelli, Federico)</p> <p>(440) Additive Manufacturing Impacts on Productions and Logistics Systems (ASHOURPOUR, MILAD; Zanardini, Massimo; Bacchetti, Andrea; Zanon, Simone)</p> <p>(475) Optimisation of the Replenishment Problem in the Fashion Retail Industry Using Tabu-Bees Algorithm (Martino, Giada; Yuce, Baris; Iannone, Raffaele; Packianather, Michael Sylvester)</p> <p>(555) Incorporating the Human Factor within Manufacturing Dynamics(Fruggiero, Fabio; Riemma, Stefano; OUAZENE, Yassine; Macchiaroli, Roberto; Guglielmi, Valerio)</p>
	TH-A-9	Supply Chain Analytics and Risk Control (room C103)	<p>Human factors in industrial and logistic system design Chairs: Fabio Sgarbossa, Daria Battini</p> <p>(168) A Simulation Based Approach for Enhancing Health Aspects in Production Systems by Integrating Work Margins (EL MOUAYNI, Ismail; ETIENNE, Alain; SIADAT, Ali; DANTAN, Jean-yves; LUX, Aurélien)</p> <p>(210) Manual Picking from Large Containers - Time Efficiency and Physical Workload (Hanson, Robin; Medbo, Lars; Jukic, Patrik; Assaf, Majeed)</p> <p>(211) Minimizing Operators' Walking Times into a Linear System Layout (Gebennini, Elisa; Zepetella, Luca; Grassi, Andrea; Rimini, Bianca)</p> <p>(256) Models for an Ergonomic Evaluation of Order Picking from Different Rack Layouts(Calzavara, Martina; Glock, Christoph; Grosse, Eric; Persona, Alessandro; Sgarbossa, Fabio)</p> <p>(260) Human Factors in Production System Design and Quality Performance – a Systematic Review (Neumann, W. Patrick; Wells, Richard; Kolas, Ahmet)</p>

09:40 am - 10:40 am **Plenary session : Prof Xiaolan Xie (room M500) Chair ASKIN Ronald**

10:40 am - 11:00 am **coffee break**

		sessions TH-B	
08:00 am - 09:40 am	TH-B-1	Cutting and Scheduling (room A001)	<p>Scheduling and Production Planning (Groupe Bermudes (Gdr MACS et GdR RO)) Chairs : David Lemoine, Philippe Lacomme</p> <p>(549) An Empirical Comparison of MRPII and Demand-Driven MRP (Miclo, Romain; Fontanili, Franck; LAURAS, Matthieu; Lamothe, Jacques; Millan, Bernard)</p> <p>(244) Robust Single Machine Scheduling with External-Party Jobs (Detti, Paolo; Nicosia, Gaia; Pacifici, Andrea; Zabalo Manrique de Lara Garazi)</p> <p>(251) An Efficient Heuristic for Scheduling on Identical Parallel Machines to Minimize Total Tardiness (Vincent, Benjamin; Duhamel, Christophe; Ren, Libo; Tchernev, Nikolay)</p> <p>(360) Efficient Approaches to Scheduling for Unrelated Parallel Machines with Release Dates(Avdeenko, Tatiana; Mezentsev, Yury)</p> <p>(188) A GRASP Embedding a Bi-Level ELS for Solving Flexible Job-Shop Problems (Kemmo, Sylvain; Lamy, Damien; Tchernev, Nikolay)</p>
	TH-B-2	Integration of complex problems in the Supply Chain Management (room A002)	<p>Production and logistics system Chairs: Tiwari Manoj K, Alice Yalaoui</p> <p>(177) Estimating the Clearing Function for a Multi-Product Production Network Based on Mean-Value Analysis (Omar, Rayan Saleem M.; Venkatadri, Uday; Diallo, Claver)</p> <p>(271) Relations between Stress Potential of Work Features and Occupational Commitment of Transport Workers - in the Context of Optimization of Logistics Strategy of a Company (Joanna Sadowska-Wrzesińska, Agnieszka Mościcka-Teske)</p> <p>(315) Two Stage Indian Food Grain Supply Chain Network Transportation-Allocation Model (Mogale, Dnyaneshwar; Kumar, Sri Krishna; Tiwari, Manoj K)</p> <p>(433) Hybrid Manufacturing / Remanufacturing Lot-Sizing Problem with Returns Supplier's Selection Under Carbon Emissions Constraint (ZOUADI, Tarik; Yalaoui, Alice; REGHOUI, Mohamed; EL KADIRI, Kamal Eddin)</p> <p>(535) The Role of Government and Media in Chinese Stock Market (Ren, Rui; Wu, Dash)</p>
	TH-B-3	Data mining and knowledge management (room C001)	<p>Data Mining for Manufacturing Engineering Chairs: Chernyshov, Kirill, Rosa Abbou</p> <p>(551) Non-Parametric Procedures under Estimating Stochastic Dependencies in Nonlinear Systems (Chernyshov, Kirill)</p> <p>(522) Toward an Integrative CSDS Based Model of Industrial R&D Division Efficiency(Pereme, Florian; Rose, Bertrand; GOEPP, Virginie; Radoux, Jean-Pierre; Belhaoua, Abdelkrim)</p> <p>(438) A New Modeling of Query Expansion Using an Effective Bat-Inspired Optimization Algorithm (KHENNAK, Ilyes; Drias, Habiba, Kechid Samir)</p> <p>(567) Information-Theoretic Statistical Linearization (Chernyshov, Kirill)</p> <p>(432) A New Clustering Algorithm: Application to Images Datasets (Drias, Habiba; Kechid Samir, Kechid Amine)</p>

	TH-B-4	Energy (room C104)	Metaheuristic Approaches for Real-Time Scheduling and Low Power Consumption Optimization in Embedded Systems. Chairs: Maddaloni, Alessandro, Farouk Yalaoui, Ghazallaoui Hamza	(58) An Enumeration Algorithm for the No-Wait Flow Shop Problem with Due Date Constraints (Hamed Samarghandi, Mehdi Behrooz) (29) A New Hybrid Steganalysis Based Approach for Embedding Image in Audio and Image Cover Media (Fatnassi, Ahlem; Gharsellaoui, Hamza; Bouamama, Sadok) (398) Smart Marble Cutting through a Vision System (Colla, Valentina; Buzzelli, Andrea; Maddaloni, Alessandro; Nastasi, Gianluca; Bioli, Gianluca) (20) IPro-GA: An Integrated Prognostic Based GA for Scheduling Jobs and Predictive Maintenance in a Single Multifunctional Machine (LADJ, Asma; YARNIER, Christophe; Benbouzi-Si Tayeb, Fatima) (524) Real-Time Scheduling Approach of Reconfigurable Embedded Systems Based on Neural Networks with Minimization of Power Consumption (Rhaïem, Gofrane; Gharsellaoui, Hamza; BEN AHMED, Samir)			
	TH-B-5	Fuzzy (room C002)	Fuzzy Modeling in Manufacturing, Management, and Control Chair: Ozgur Kabak, Frédéric Dugardin	(311) A Novel Group Decision Making Approach Based on the Cumulative Belief Degrees (Ervural, Bilal; Kabak, Ozgur) (325) On the Statement of a System Development Control Problem with Use of SWOT-Analysis on the Cognitive Model of a Situation (Avdeeva, Zinaida; Kovriga, Svetlana; Makarenko Dmitry) (215) Determining the Criteria and Evaluating Six Sigma Projects Via Fuzzy ANP Method in Group Decision (Erginel, Nihal; Altintas, Merve; Küçük, Gamze) Production planning and control by the mean of Buffers – How Festo implemented the Demand Driven MRP approach (Nicolas Vareillas) (328) Intuitionistic Fuzzy Multicriteria Evaluation of Outsource Manufacturers (KAHRAMAN, Cengiz; Oztaysi, Basar; Cevik Onar, Sezi)			
	TH-B-6	Optimization for transportation and vehicle routing problems (room B101)	Collaborative Transportation Planning and Profit/Cost Allocation Chairs: Herve Manier, Haoxun Chen	(180) Cross-Evaluation Cost Allocation for Vehicle Routing Games (Chen, Haoxun) (191) Population-Based Negotiation of Contract Clauses and Transportation Request Assignments (Jacob, Jonathan; Buer, Tobias) (226) Shipper Collaboration with Pickup and Delivery Requests in Reverse Logistics (Lv, Xiaohui; Wang, Nengmin; Yang, Zhen; Chen, Haoxun) (385) Using Simulation to Improve Performance of a Real World Distribution Center (Bahrami, Behnam; Aghezzaf, El-Houssaine; Limère, Veronique) (397) Shippers' Collaboration in City Logistics (MANIER, HERVE; MANIER, MARIE-ANGE; AL CHAMI, Zaher)			
	TH-B-7	Reliability, maintenance and Safety (room B105)	Reliability and Maintenance for Industrial Systems and Networks Chairs: Daoud Ait-Kadi, Hayet Mouss	(216) Monte Carlo Simulation to Solve Fuzzy Dynamic Fault Tree (Abdo, houssein; Flaus, Jean-Marie) (417) An Integrated Approach to Analysis and Modeling of End of Life Phase of the Complex Products (Keivanpour, Samira; Ait-Kadi, Daoud) (528) Prioritization of Failures in Radiation Therapy Delivery (Abbasgholizadeh Rahimi, Samira; Jamshidi, Afshin; Ait-Kadi, Daoud; Ruiz, Angel; Rebaiaia, Mohamed-Larbi) (540) Numerical Comparative Analysis between Age and Block Maintenance Strategies in the Presence of Probability Distributions with Increasing Failure Rate (Mohamed-Larbi Rebaiaia, Daoud Ait-Kadi, Samira Abbasgholizadeh Rahimi, Afshin Jamshidi) (550) Application of Fuzzy Cognitive Map As an Advanced Risk Assessment Tool in Complex and Dynamic Systems (Jamshidi, Afshin; Abbasgholizadeh Rahimi, Samira; Ruiz, Angel; Ait-Kadi, Daoud; Rebaiaia, Mohamed-Larbi)			
	TH-B-8	Signal processing and system control (room C102)	System Identification for Manufacturing Control Application Chairs: Bakhtadze Natalia, Elena Jharko	(182) Parametric Identification of Nonlinear Model for Managed Pressure Drilling (Alexandrov, A. G.; Alexandrov, Vadim; Shatov, Dmitriy) (183) Predictive Control of Large-Scale Systems and Ensemble Group-Stability Estimation (Kleparsky, Vadim; KLEPARSKAYA, EKATERINA) (336) Applying the Multi-Scale Wavelet-Transform to the Identification of Non-Linear Time-Varying Plants (Bakhtadze, Natalia; Sakrutina, Ekaterina) (185) Shifting Method for Relay Feedback Identification (Hofreiter, Milan)			
	TH-B-9	Supply Chain Analytics and Risk Control (room C103)	Supply Chain Scheduling Chair: Dmitry Ivanov, Mathhieu Godichaud	(203) Integrated Virtual Preparation and Commissioning: Supporting Formal Methods During Automation Systems Development (Dahl, Martin; Bengtsson, Kristofer; Bergagård, Patrik; Fabian, Martin; Falkman, Petter) (377) An Accelerated MIP Model for the Single Machine Scheduling with Preventive Maintenance (SOUISSI, OMAR; BENMANSOUR, Rachid; Artiba, Abdelhakim) (519) Truck Driver Scheduling Problem: Literature Review (Koubâa, Maysa; Dhoub, Souhail; Dhoub, Diala; EL MHAMED, Abderrahman) (525) An Iterative Greedy Insertion Technique for Flexible Job Shop Scheduling Problem (Bekkar, Azzedine; Guemri, Oualid; Bekrar, Abdelghani; aissani, nassima; Beldjilali, bouziane; Trentesaux, damien)			
11:00 am - 12:40 pm							
12:40 pm - 2:00 pm	lunch						
1:40 pm - 2:00 pm							
2:00 pm - 3:00 pm	workshop Digital Manufacturing (room A001)			Social program 1:40pm-7:00pm			
3:00 pm - 4:00 pm						TH-C-1 Rand Model Designer (room C104)	Tutorial 3 : Component models: «physical» modeling. Component models with variable structure (agent-based modeling). Examples. (Yuri Senichenkov)
4:00 pm - 6:00 pm						TH-D-1 Rand Model Designer (room C104)	Tutorial 4. Comparative analysis RMD, Simulink+Toolboxes, Modelica-based tools. (Yuri Senichenkov)
6:00 pm - 7:00 pm							