



EngOpt 2014

4th International Conference
on Engineering Optimization

PROGRAMME

8-11 September 2014

Instituto Superior Técnico
Lisbon, Portugal

Welcome Message

On behalf of EngOpt organizing committee we are pleased to welcome you to Lisbon for the 4th International Conference on Engineering Optimization held at Instituto Superior Técnico of the Technical University of Lisbon.

The main goal of EngOpt conference series is to periodically bring together engineers, applied mathematicians and computer scientists working on research, development and practical application of optimization methods applied to all engineering disciplines or developing basic techniques in this field. Following the very successful Conferences in Rio de Janeiro (EngOpt2012), the 4th International Conference on Engineering Optimization (EngOpt2014) is now held in Lisbon. The purpose of this Conference is to provide opportunities for scientists and engineers to meet and to discuss current research, new concepts and ideas and establish opportunities for future collaborations in all aspects of Engineering Optimization.

We invite you to be an active participant in this Conference and to contribute to any topic, or mini-symposium, of your scientific interest. By promoting a relaxed atmosphere for discussion and exchange of ideas we expect that new paths for research are stimulated and promoted and that new collaborations can be fostered. We hope that the 4th International Conference on Engineering Optimization will have an important impact on the research in all topics included in its programme.

We want to express our appreciation to all members of the committees involved in the preparation of this Conference, to all mini-symposia organizers who identified and promoted some of the most active topics of research in Engineering Optimization, to all the staff who are managing the different aspects of the Conference and to all the contributing authors and participants who will create the real Conference. We hope that all of you feel rewarded for your participation and contribution.

Yours Sincerely,

Hélder Rodrigues, IST (EngOpt2014 Chairman)
José Herskovits, COPPE/UFRJ (EngOpt2014 Co-Chairman)
Cristóvão Mota Soares, IST (EngOpt2014 Co-Chairman)

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Conference Organization

Organizing Committee

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- Philippe Toint, University of Namur, Belgium
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- C.F. Castro, Porto, Portugal
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- A.L. Custódio, Lisboa, Portugal
- R. Das, Auckland, New Zealand
- A. Diaz, East Lansing, USA
- Z. Dimitrovová, Lisboa, Portugal
- J. Du, Beijing, China
- G. Dulikravich, Miami, USA
- P. Duysinx, Liège, Belgium
- G. Dzierzanowski, Warsaw, Poland
- P. Eberhard, Stuttgart, Germany
- A. Elkamel, Waterloo, Canada
- A. Faria, S. José dos Campos, Brazil
- J.R. Faria, João Pessoa, Brazil
- C.M. Fonseca, Coimbra, Portugal
- X. Guo, Dalian, China
- S. Gutierrez, Santiago, Chile
- R.T. Haftka, Gainesville, USA
- J.A. Hernandes, S. José dos Campos, Brazil
- N. Imam, Oak Ridge, USA
- M.L. Indrusiak, S. Leopoldo, Brazil
- K. Ivanov, Almaty, Kazakhstan
- B. Ivorra, Madrid, Spain
- H. Jensen, Valparaíso, Chile
- F. Jouve, Paris, France
- N.-H. Kim, Gainesville, USA
- Y.Y. Kim, Seoul, Korea
- A. Klarbring, Linköping, Sweden
- J.P. Kuzhichalil, Lisbon, Portugal
- J. Lellep, Tartu, Estonia
- A.C.C. Lemonge, Juiz de Fora, Brazil
- A. Leski, Warsaw, Poland
- J. Logo, Budapest, Hungary
- R.A. Loyola, Bilbao, Spain
- E. Lund, Aalborg, Denmark
- N. Maïzi, Paris, France
- A.C. Marta, Lisboa, Portugal
- J.R.R.A. Martins, Michigan, USA
- N.F.M. Martins, Lisboa, Portugal
- K. Maute, Colorado Boulder, USA
- A. Nastase, Aachen, Germany
- S. Nishiwaki, Kyoto, Japan
- A. Novotny, Petropolis, Brazil
- M. Ohsaki, Higashi-Hiroshima, Japan
- N. Olhoff, Aalborg, Denmark
- H. Orlande, Rio de Janeiro, Brazil
- P. Papalambros, Michigan, USA
- G. Paulino, Urbana, USA
- N. Pedersen, Lyngby, Denmark
- P. Pedersen, Lyngby, Denmark
- O.M. Querin, Leeds, UK
- S. Rao, Miami, USA
- J. Roche, Vandoeuvre Les Nancy, France
- A. Secchi, Rio de Janeiro, Brazil
- E.C.N. Silva, São Paulo, Brazil
- E. Silva, Itajubá, Brazil
- S. Silva, Recife, Brazil
- T. Sokol, Warsaw, Poland
- M. Stolpe, Roskilde, Denmark
- A. Suleman, Lisboa, Portugal
- J. Taler, Cracow, Poland
- M. Tanaka, Santarém, Brazil
- A.-M. Toader, Lisboa, Portugal
- D. Tortorelli, Urbana, USA
- A. Tovar, Indianapolis, USA
- F. Van Keulen, Delft, Netherlands
- D. Vucinic, Brussels, Belgium
- G.H. Yoon, Seoul, Korea

Organizing Institutions

- IST, Instituto Superior Técnico, University of Lisbon
- IDMEC/IST - Institute of Mechanical Engineering

Endorsed by

APMTAC – Portuguese Association of Theoretical, Applied and Computational Mechanics

EUROPT – The Continuos Optimization Working Group of EURO

IFORS – International Federation of Operational Research Societies

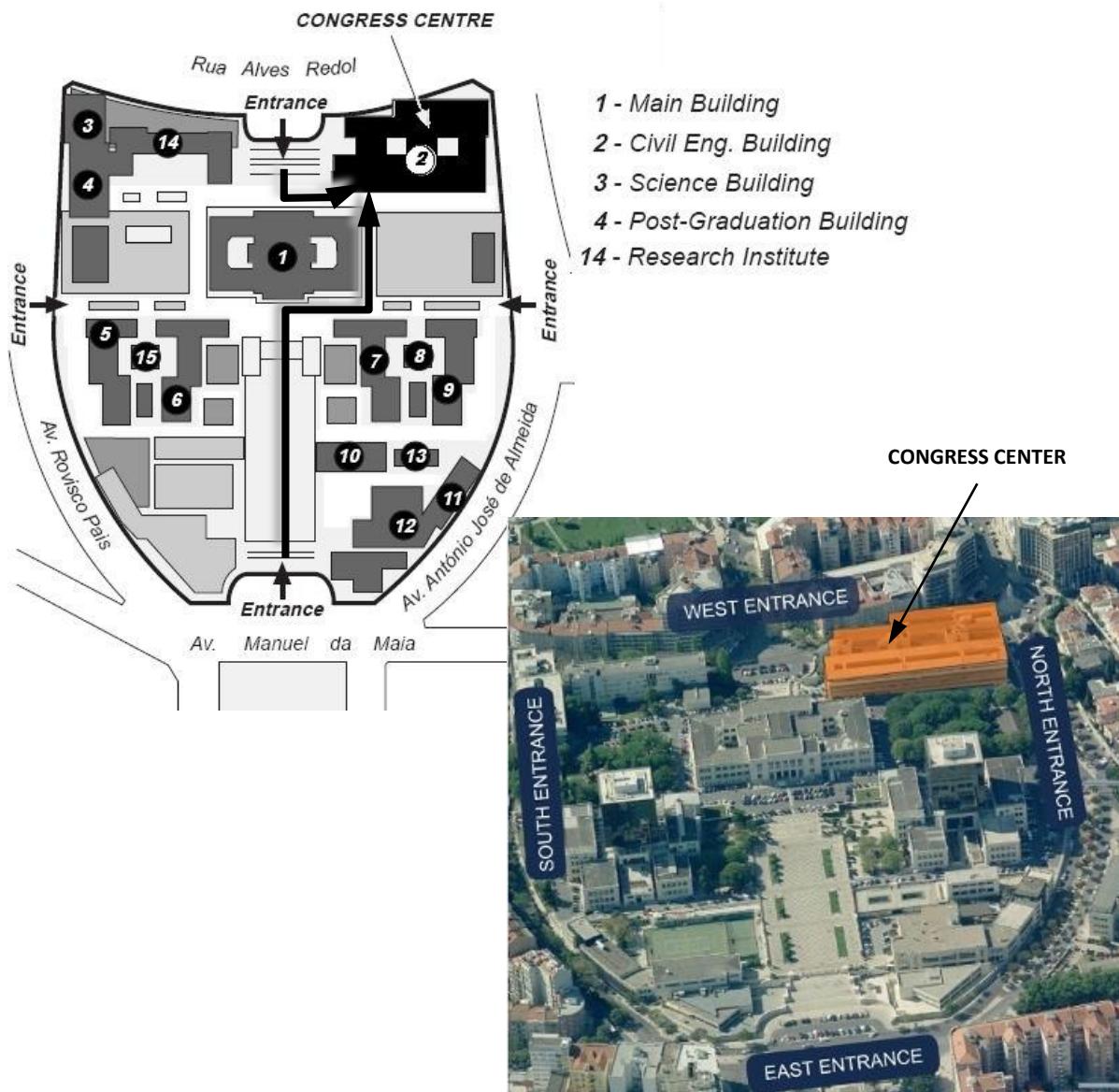
ISSMO – International Society for Structural and Multidisciplinary Optimization

MOS – Mathematical Optimization Society

Conference Venue

The 4th International Conference on Engineering Optimization (EngOpt 2014) takes place in the Instituto Superior Técnico Congress Center, situated at the Civil Engineering Building (Pavilhão de Civil) with the address:

- Congress Center (Civil Engineering Building)
Instituto Superior Técnico
Av. Rovisco Pais 1
1049-001 Lisboa



Lisbon with Subway Lines



General Tourist Information

Getting to Lisbon by air

Direct flights from most of European cities, North or South America and Africa land at the Portela Airport, terminal 1. A taxi ride from the airport to IST is about 4-5 km that takes 10-15 min, depending on traffic, and should cost around 8€. To downtown the taxi ride is about 7 km and should cost around 10€. 1.60€ is charged for the transportation of luggage or animals. A sure option is the "Taxi Voucher" a prepaid taxi service starting at 16.40€, on sale at the "Information Desk" in the arrival terminal. Lisbon Airport has its own Metro Station, Aeroporto - red line (see map of Lisbon with subway lines). Other options are the AeroBus and the Aeroshuttle (3.5€).

Getting to Lisbon by car

Drivers coming from the north use highway A1 while those coming from East and South use highway A2, entering in Lisbon through the 25 de Abril bridge or use A12 and enter by the Northeast of Lisbon through the Vasco da Gama bridge. The speed limits in Portugal are 120 km/h on highways, 90 km/h on roads and 50 km/h in urban areas, unless marked otherwise.

Getting to Lisbon by train

The St. Apolónia station is the terminal for trains arriving from the North of Portugal. Another option is to use the train station Oriente. From the South of Portugal an option is to use the train station Oriente. Connections to the metro lines exist at both stations (St. Apolónia - blue line, Oriente - red line).

Moving around

Taxi:

Lisbon is served by an extensive network of public transportation that can take you anywhere in the city and to its surroundings. Taxis (black and green or beige) are cheap when comparing to most of the European countries. They can be called by phone, picked-up on taxi plazas or stopped on the street. The fare on the taxi meter should start

at 3.25€ (daytime pick-up) or 3.90€ (nighttime). Outside the city limits, city fares are charged per kilometer. 1.60€ is charged for the transportation of luggage or animals. Before taking a taxi, inquire about the fare.

Metro:

The Lisbon Metro is a very comfortable and easy way to reach most of the city, from 6:30 to 1:00. The Metro lines reach most of the city being the Metro stations close to IST:

- Alameda (red and green line)
- Saldanha (red and yellow line)

Bus

The bus routes cover all Lisbon and extend to its outskirts. The tickets can be pre-paid, at the counters of Carris, the surface transportation operator for Lisbon, or bought aboard the bus, electric cars or funiculars.

For IST hop off on one of the following bus stops:

- Av. Manuel Maia
- Av. Rovisco Pais
- Arco do cego

Metro and Bus Fares:

Reusable card – 0.50 €

METRO/CARRIS – 1.40 €

CARRIS

- Bus – 1.80€ (on board fare)
- Tram – 2.85 (on board fare)

Trains

Suburban trains to Estoril and Cascais depart from the Cais do Sodré train station, to the south of the river cities from Roma-Areeiro (Entrecampos) while to Sintra the trains depart from Rossio train station or Oriente (Entrecampos). The ride to Cascais or to Sintra should take about 35-45 min, each way. The train ride to south of the river is a highlight as the train will cross the 25 de Abril bridge with magnificent views of Lisbon.

For IST the nearby train stations are:

- Roma-Areeiro
- Entrecampos

National emergency number: 112

Other general information

- Time zone: GMT +1 summer time
- Electricity: 220V, 50 Hz with standard European power sockets
- Currency: Euro (€)
- Banks: working hours are 8:30 – 15:00 (Monday-Friday)
- Pharmacies: 9:00 – 19:00
- Shops: 9:00 – 19:00
- Shopping Malls: 10:00 – 23:00
- Temperature: Average high 28°C, Average low 18°C

Main Museums in Lisbon:

- Centro de Arte Moderna (Modern Art Museum)
- Fundação Oriente (Oriente Foundation)

- Museu Calouste Gulbenkian (Calouste Gulbenkian Museum)
- Museu dos Coches (Coach Museum)
- Museu Nacional de Arte Antiga (National Museum for Old Art)
- Colecção Berardo (The Berardo Collection)
- Museu do Azulejo (Tile Museum)

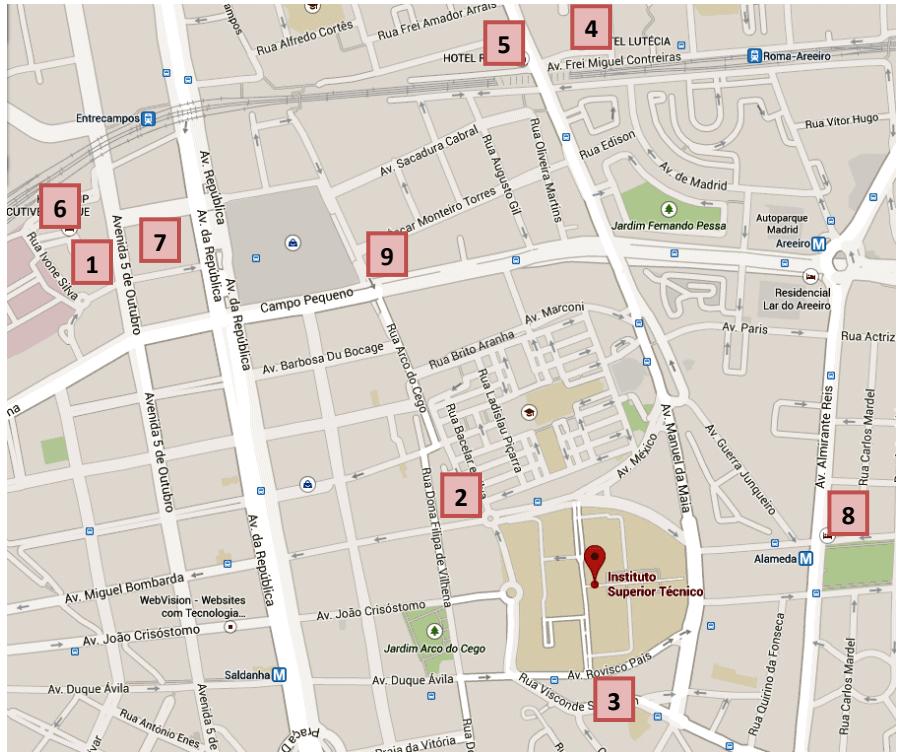
Main Monuments in Lisbon:

- Aqueduto das Águas Livres (Free Waters' Aqueduct)
- Basílica da Estrela (Estrela Churro)
- Castelo de São Jorge (Saint George's Castle)
- Sé Patriarcal (Patriarchal Cathedral)
- Mosteiro dos Jerónimos (Jerónimos Monástico)
- Padrão dos Descobrimentos (Monument to the Discoveries)
- Torre de Belém (Belém Tower)

Accommodation

Hotels close to IST:

1. Hotel VIP Grand
2. Hotel Holiday Inn Lisboa
3. Hotel Turim Alameda
4. Hotel Lutécia
5. Hotel Roma
6. Hotel Zurique
7. Hotel Berna
8. Hotel AS Lisboa
9. Hotel Alif Campo Pequeno



General Information

Registration Open Hours

- Sunday, September 7, 15:00-18:00
- Monday, September 8, 08:30-18:00
- Tuesday, September 9, 08:30-18:00
- Wednesday, September 10, 08:30-18:00
- Thursday, September 11, 08:30-14:00

EngOpt 2014 Secretariat

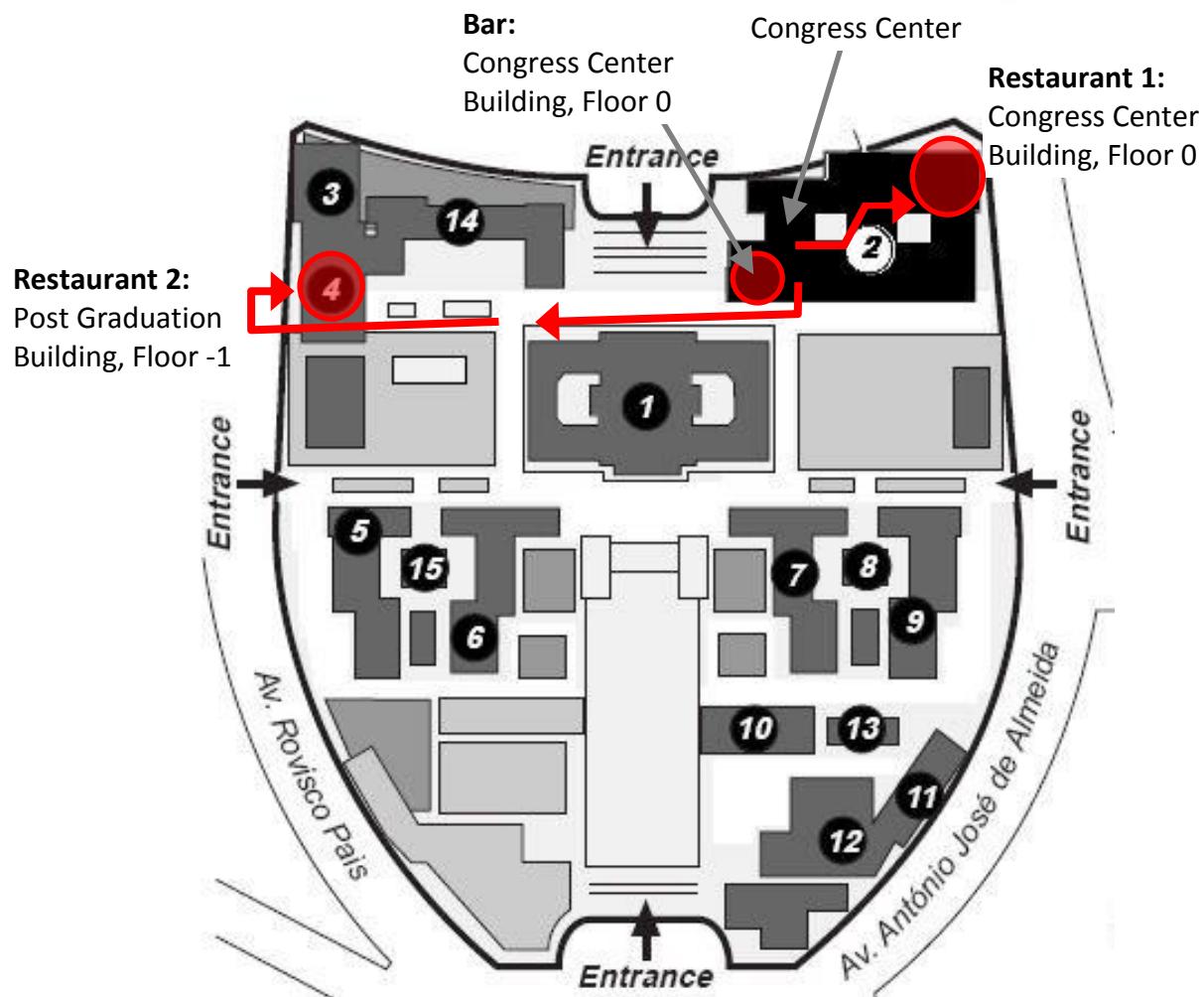
CPM - Centre for Mechanical Design
Mechanical Engineering Department
Instituto Superior Técnico
Av. Rovisco Pais, 1049-001 Lisboa, Portugal
Phone: +351 218417280
Fax: +351 218417915
Email: engopt2014@dem.ist.utl.pt
Web: www.dem.ist.utl.pt/engopt2014/

Coffee-Breaks

The coffee-breaks will take place in the hall 2 and hall 1S of the conference center (see map of the conference center) and will be open to all participants. Kindly wear your Conference Badge.

Lunches

The Lunch tickets included in the package received during the registration will be honored at the two restaurants and a bar marked in the map below. Both restaurants offer a few choices for lunch in self-service. The bar allows the participants the choose their own lunch at will, within the price range of the lunch tickets, otherwise the exceeded amount must be paid. Note that the lunch tickets have different colors for the different days and are valid only for the day printed in the front.



Social Program

Welcome Reception – Monday, September 8, 18h-20h

The welcome reception will take place at the hall 2 and hall 1S of the Congress Center (see the Conference Center Floor Plans)



Congress Banquet – Wednesday, September 10, 20h-

The congress banquet will take place in the down town nearby the Tagus River, at Patio da Galé, Terreiro do Paço (also called Praça do Comércio). To get there, you can take the subway and pick the stations Terreiro do Paço or Baixa Chiado. Please do not forget to **bring your Banquet Vouchers**.



Conference Information

Wireless Internet Access

Step 1: Select the eduroam-guest network

Step 2: Open your web access program (Microsoft Internet Explorer or other) and select **WEB BASED LOGIN**.

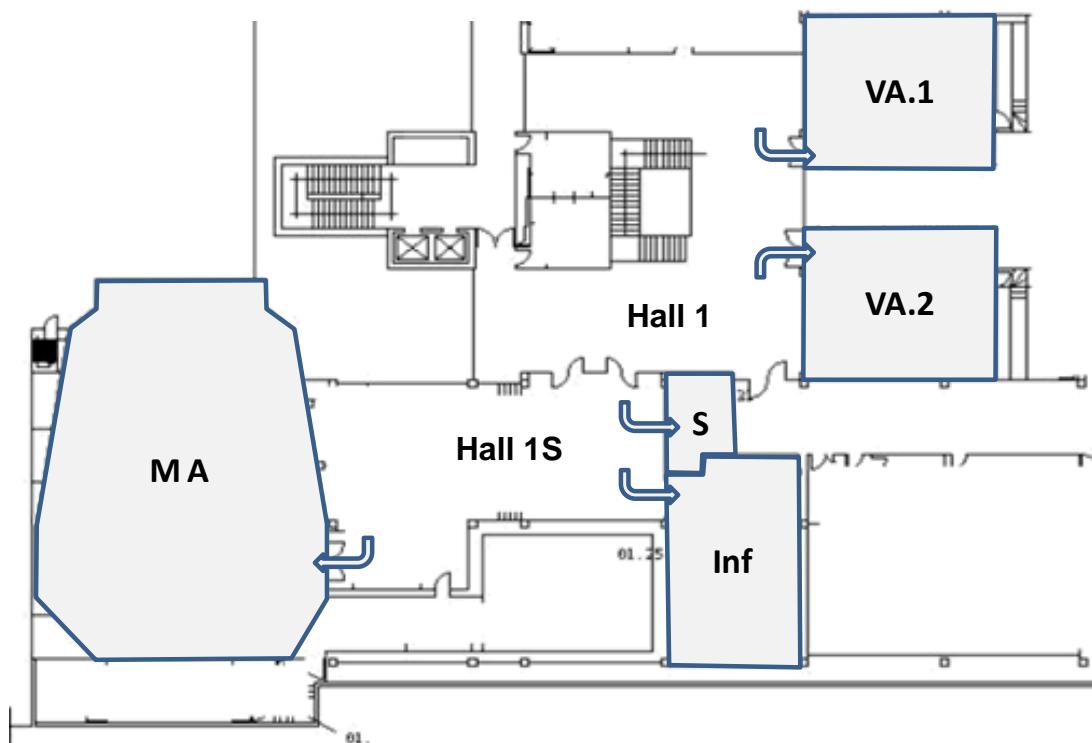
Step 3: Enter user: **engopt**
password: **3pESPx**

Instructions for Presenters

- Each Oral presentation will take 20 minutes including discussion.
- The files required for the presentation (PowerPoint or PDF) must be uploaded and tested in the Computer placed in the room before the respective presentation session. Conference computers are Windows 7 machines with Office 2010 and Acrobat PDF reader.
- Posters will be displayed on vertical boards with maximum dimensions of 900mm (width) x 1200mm (height), which corresponds approximately to a standard A0-portrait.
- Poster session is schedule for Wednesday, September 10, in the hall 1 of the Conference Center (see map of the Conference Center). The posters should be posted in the morning before the coffee break and must be removed at the end of the poster session.

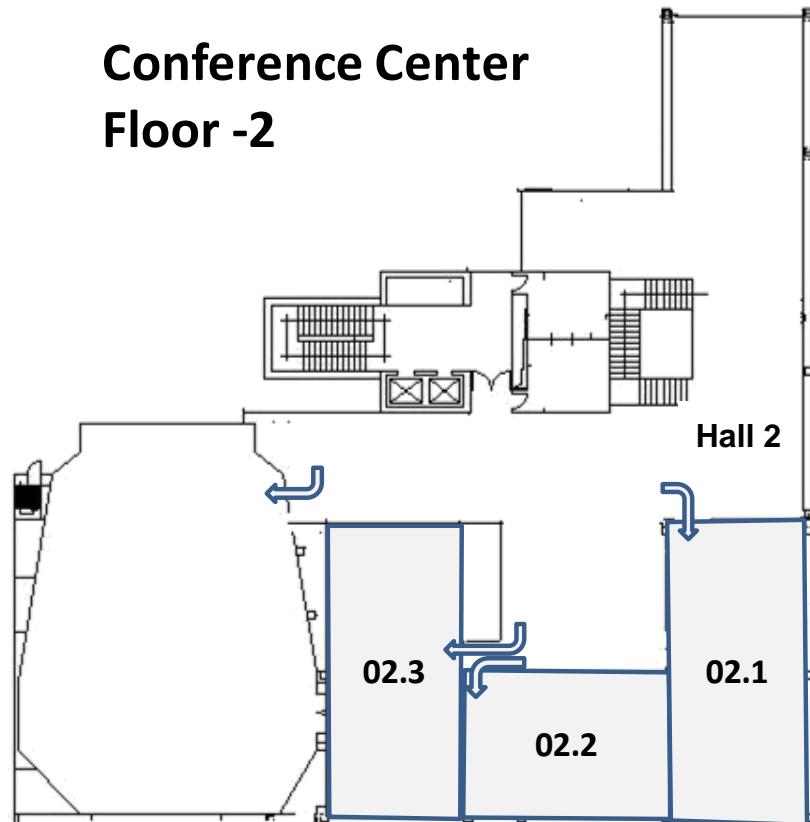
Conference Center Floor Plans

Conference Center Floor -1



MA - Main Auditorium
S - Secretariat
Inf - Computer Room
VA.1 - Lecture Room
VA.2 - Lecture Room
02.1 - Lecture Room

Conference Center Floor -2



EngOpt 2014 Scientific Programme

Programme at a glance

	SUNDAY, September 7	MONDAY, September 8	TUESDAY, September 9	WEDNESDAY, September 10	THURSDAY, September 11	
08:40		Registration	Parallel Sessions	Parallel Sessions	Parallel Sessions	08:40
10:20		Opening Session Main Auditorium, 10:05-10:20				10:20
10:35		Coffee Break	Coffee Break	Coffee Break	Coffee Break	10:35
12:35		Parallel Sessions	Parallel Sessions	Parallel Sessions	Parallel Sessions	12:35
14:00		Lunch	Lunch	Lunch	Lunch	14:00
16:00	Registration 15:00-18:00	Parallel Sessions	Parallel Sessions	Parallel Sessions	Parallel Sessions	16:00
16:15		Coffee Break	Coffee Break	Coffee Break	Coffee Break	16:15
17:55		Parallel Sessions	Parallel Sessions	Parallel Sessions	Parallel Sessions	17:55
20:00		Welcome Reception		Congress Banquet		20:00

Parallel Sessions

Parallel sessions

Monday, September 8th, 2014

10:35 - 12:35

Session: D-01 Design Optimization and Inverse Problems				Room:MA
Chair: George Rozvany				
Hours	ID	Speaker	Title	
10:35-10:55	5736	Lazarov, Boyan S	Topology Optimized Designs of Steady State Conduction Heat Transfer Problems with Convection Boundary Conditions <i>Lazarov, Boyan S; Alexandersen, Joe ; Sigmund, Ole</i>	
10:55-11:15	5754	Wallin, Mathias	Topology Optimization Based on Inverse Motion Form Finding <i>Wallin, Mathias ; Ristinmaa, Matti</i>	
11:15-11:35	5770	Gupta, Deepak K.	Topology Optimization for Improving the Performance of Solar Cells <i>Gupta, Deepak K.; Langelaar, Matthijs ; Barink, Marco ; van Keulen, Fred</i>	
11:35-11:55	5861	Evgrafov, Anton	A Locally Cubically Convergent Algorithm for Topology Optimization of Stokes Flows <i>Evgrafov, Anton</i>	
11:55-12:15	5894	Nakamura, Hiroyuki	Study on The Topology Optimization of Electronic Parts Mounted on Micro Satellite <i>Nakamura, Hiroyuki</i>	
12:15-12:35	5906	Silva, Olavo M.	A Topology Optimization Procedure for the Vibrational Power Flow Response in 3D FE Models <i>Silva, Olavo M.; Neves, Miguel M.; Lenzi, Arcanjo</i>	

Session: I-01 Industrial Applications				Room: 02.1
Chair: Cristovao Mota Soares				
Hours	ID	Speaker	Title	
10:35-10:55	5494	Beauthier, Charlotte	Hypersonic Cryogenic Tank Design Using Mixed-Variable Surrogate-Based Optimization <i>Beauthier, Charlotte ; Hendrick, Patrick ; Mahajan, Ashvin ; Sainvitu, Caroline ; Sharifzadeh, Shayan ; Verstraete, Dries</i>	
10:55-11:15	5508	Afzal, Arshad	A Multi-Objective Optimization Procedure for Micromixer Design Using MOGA <i>Afzal, Arshad ; Kim, Kwang-Yong</i>	
11:15-11:35	5619	Andry, Philippe	Better Flexible Hoses Design Thanks to Optimization <i>Andry, Philippe</i>	
11:35-11:55	5684	Marano, Giuseppe C.	Optimization of a Dissipative Connection in Wall-Frame Systems <i>Greco, Rita ; Marano, Giuseppe C.</i>	
11:55-12:15	5885	Aute, Vikrant	An Adaptive Multiscale Approximation Assisted Multiobjective Optimization Applied to Compact Heat Exchangers <i>Saleh, Khaled H ; Bacellar, Daniel ; Aute, Vikrant ; Radermacher, Reinhard</i>	
12:15-12:35	6038	Popov, Grigorii M.	Seven-Stage Axial Compressor Optimization <i>Matveev, Valeriy N.; Egorov, Igor N.; Baturin, Oleg V.; Popov, Grigorii M.</i>	



Session: N-01 Numerical Optimization Techniques				Room: VA.1
Chair: Janos Pinter				
Hours	ID	Speaker	Title	
10:35- 10:55	5582	Yang, Songlin	The Comprehensive Optimization Analysis of Mechanical properties of the Monohull Ship <i>Yang, Songlin; Yu, Qiang ; Chen, Yi</i>	
10:55- 11:15	5974	Ramos, Nuno NR	Railway Seat Structure Optimization for Crashworthiness Improvement using Meta-modeling <i>Ramos, Nuno NR; Ambrosio, Jorge</i>	
11:15- 11:35	6017	Lee, Jae-Woo	Tailless UAV Design Using Variable Fidelity Method with Global Design Search and Radial Basis Function Networks <i>Lee, Jae-Woo ; Tyan, Maxim ; Nguyen, Nhu Van ; Kim, Sangho ; Nah, SeungHyeog</i>	
11:35- 11:55	6109	Herskovits, José	Structural Optimization Including Constraints on the Natural Frequencies with a Nonlinear Semidefinite Programming Approach <i>Herskovits, José ; Roche, Jean Rodolphe; Bazan, Elmer</i>	
11:55- 12:15	5533	Bandeira, Alex Alves	Augmented Lagrangian Algorithm Applied to Simulate Impact Problems <i>Bandeira, Alex Alves; Pimenta, Paulo M.</i>	
12:15- 12:35				

Session: E-01 Efficient Analysis and Reanalysis Techniques				Room: VA.2
Chair: Jose Herskovits				
Hours	ID	Speaker	Title	
10:35- 10:55	5525	Yue, Yao	Accelerating Cyclic Steady State Optimization of Linear Simulated Moving Bed Chromatography Models by Krylov-Type Model Order Reduction Methods <i>Yue, Yao ; Li, Suzhou ; Feng, Lihong ; Seidel-Morgenstern, Andreas ; Benner, Peter</i>	
10:55- 11:15	5643	Camaño, Alexandra L	Development of a New Technique for Straightening of Welding Induced Distortion in Ship Structures <i>Camaño, Alexandra L</i>	
11:15- 11:35	5831	Hidalgo-Silva, Hugo	Improving Linear Inversion Algorithms for Geosounding Inversion <i>Hidalgo-Silva, Hugo ; Gomez-Trevino, Enrique</i>	
11:35- 11:55	5899	Beremlijski, Petr	On Solution of 3D Contact Shape Optimization Problems with Coulomb Friction Based on Domain Decomposition <i>Beremlijski, Petr ; Markopoulos, Alexandros</i>	
11:55- 12:15	5946	Shetty, Sandeep	Efficient Reliability-Based Optimization using a Combined Metamodel and FE-Based Strategy <i>Shetty, Sandeep</i>	
12:15- 12:35	5386	Kuzmina, Lyudmila K	A.M.Lyapunov Reduction Principle in Problems of Parametric Stability/Optimality for Complex Systems <i>Kuzmina, Lyudmila K</i>	

Parallel sessions

Monday, September 8th, 2014

14:00 - 16:00

Session: D-02 Design Optimization and Inverse Problems				Room: MA
Chair: Ole Sigmund				
Hours	ID	Speaker	Title	
14:00-14:20	5439	Kuci, Erin	Shape Optimization of Interior Permanent Magnet Motor for Torque Ripple Reduction <i>Kuci, Erin ; Geuzaine, Christophe ; Dular, Patrick ; Duysinx, Pierre</i>	
14:20-14:40	5512	Gangl, Peter	Design Optimization of Electric Machines Using Shape Optimization and Sensitivity-Based Topology Optimization <i>Gangl, Peter ; Langer, Ulrich</i>	
14:40-15:00	5842	Vondrejc, Jaroslav	Shape Optimization for Homogenized Phononic Materials and Band Gap Structures <i>Rohan, Eduard ; Vondrejc, Jaroslav ; Heczko, Jan</i>	
15:00-15:20	5892	Otomori, Masaki	Topology Optimization for the Design of Light-Trapping Structures Considering a Uniform Cross-Sectional Constraint <i>Otomori, Masaki ; Yamada, Takayuki ; Izui, Kazuhiro ; Nishiwaki, Shinji ; Kogiso, Nozomu</i>	
15:20-15:40	5988	Leon, Jersson X	Tuning Parameters Using Bio-Inspired Multiobjective Optimization Algorithm for Topology Optimization Based on Bacterial Chemotaxis <i>Leon, Jersson X ; Guzmán, María A</i>	
15:40-16:00	5990	van der Veen, Gijs J.	Integrated Optimization of Controller and Topology for Mechatronic Systems <i>van der Veen, Gijs J. ; Langelaar, Matthijs ; van Keulen, Fred</i>	

Session: I-02 Industrial Applications				Room: 02.1
Chair: João Dias				
Hours	ID	Speaker	Title	
14:00-14:20	5562	Olivera, Ana C	Robust Assignment of Fleet Size and Travel Routes for Transportation to a Single-Destiny Using Optimization via Simulation <i>Gabriel, Baquela Enrique ; Olivera, Ana C</i>	
14:20-14:40	5142	Harald, Harald	Experimental and Analytical Flow Optimization of Hydraulic Accumulators <i>Harald, Harald ; Zimmermann, Uwe ; Hübner, Dirk</i>	
14:40-15:00	5575	Kawtummachai, Ruengsak	A Hybrid Harmony Search Algorithm for a Green Vehicle Routing Problem <i>Kawtummachai, Ruengsak ; Shohdohji, Tsutomu</i>	
15:00-15:20	5625	Callies, Rainer	Optimal Race Course Design for Air Races <i>Callies, Rainer</i>	
15:20-15:40	5772	Averbakh, Igor	Transportation Network Construction Planning Problems <i>Averbakh, Igor ; Pereira, Jorge</i>	
15:40-16:00	5947	Oliveira Júnior, Antonio A. M.	The Ant Colony Optimization Algorithm for Offshore Air Transport in Northeast Of Brazil <i>Mota , Liliane L. O. ; Oliveira Júnior, Antonio A. M. ; Souza, Domingos Fabiano D. F. S. ; Soletti , João Inácio J. I. ; Souza, Thiago X. R. ; Carvalho, Sandra Helena S. H. V. ; Jesus , Edilson E. ; Rocha, Kamila K. A.</i>	



Session: N-02 Numerical Optimization Techniques				Room: VA.1
Chair: Pauli Pedersen				
Hours	ID	Speaker	Title	
14:00-14:20	5740	Gambarelli, Paola	A Surrogate-Assisted Evolutionary Algorithm for Dynamic Structural Identification <i>Gambarelli, Paola ; Vincenzi, Loris</i>	
14:20-14:40	5815	Mansour, Rami	A Single-loop Method for Reliability-Based Design Optimization <i>Mansour, Rami ; Olsson, Mårten</i>	
14:40-15:00	5850	Arakawa, Masao	Schemes in Setting Position and Radius of RBF in Convolute RBF for Surrogate Optimization <i>Arakawa, Masao ; Kitayama, Satoshi</i>	
15:00-15:20	5910	Zambolini-Vicente, Bruno G. G. L.	Robust Optimization of Shunt Circuits for the Passive Control Of Composite Structures <i>Zambolini-Vicente, Bruno G. G. L. ; Silva, Victor A. C. ; de Lima, Antônio M. G.</i>	
15:20-15:40	5914	Gubarev, Fedor V	Towards Large-Scale Surrogate-Based Optimization <i>Gubarev, Fedor V ; Pospelov, Alexis I.</i>	
15:40-16:00	5953	Pant, Rajkumar S	An Improved Methodology for Airfoil Shape Optimization using Surrogate Based Design Optimization <i>Rajaram, Dushyanth ; Pant, Rajkumar</i>	

Session: MS6-01 MS06 - Inverse Problems in Engineering				Room: VA.2
Chair: Schalk Kok, Daniel N. Wilke				
Hours	ID	Speaker	Title	
14:00-14:20	5620	Martins, Nuno F. M.	Direct and Optimization Methods for the Localization of Immersed Obstacles in Porous Media. <i>Martins, Nuno F. M.</i>	
14:20-14:40	5732	Wilke, Daniel Nicolas	Comparison of Two Inverse Strategies to Characterize Soil Profiles <i>Wilke, Daniel Nicolas ; Kok, Schalk ; Heymann, Gerhard</i>	
14:40-15:00	5739	Kok, Schalk	Estimating the Stress-Strain Curve of Steel Wire <i>Kok, Schalk ; Wilke, Daniel</i>	
15:00-15:20	5779	Mierzwiczak, Magdalena	Determination of Non-Uniformity of Unidirectional Fibrous Porous Media as Inverse Problem <i>Kolodziej, Jan A ; Mierzwiczak, Magdalena ; Fritzkowski, Paweł</i>	
15:20-15:40	5789	Jansen van Rensburg, Gerhardus J	Simultaneous Boundary Value and Material Parameter Estimation using Imperfect Compression Data. <i>Jansen van Rensburg, Gerhardus J ; Kok, Schalk ; Wilke, Daniel N</i>	
15:40-16:00	5922	Asaadi, Erfan	Using Inverse Mapping to Directly Solve Inverse Problems <i>Asaadi, Erfan ; Kok, Schalk ; Heyns, Stephan</i>	

Parallel sessions

Monday, September 8th, 2014

16:15 - 17:55

Session: D-03 Design Optimization and Inverse Problems				Room: MA
Chair: Sergio Turteltaub				
Hours	ID	Speaker	Title	
16:15- 16:35	5691	Vicente, Diogo A.	Parameterization Formulations for Aerofoil Shape Optimization <i>Vicente, Diogo A.; Gamboa, Pedro V.; Silvestre, Miguel A.R.</i>	
16:35- 16:55	5695	Patil, Dhaval A	Surrogate Based Analysis and Shape Optimization of an Aerostat Envelope <i>Pant, Rajkumar S; Paul, Smritinandan ; Patil, Dhaval A</i>	
16:55- 17:15	5843	Papadimitriou, Dimitrios I.	Robust Reliability-Based Aerodynamic Shape Optimization <i>Papadimitriou, Dimitrios I.; Papadimitriou, Costas</i>	
17:15- 17:35	6383	Patho, Robert	Optimal Shape Design in Frictional Contact Problems With a Solution-Dependent Friction Coefficient <i>Patho, Robert</i>	
17:35- 17:55	6760	Zapletal, Jan	BEM Based Shape Optimization Using Subdivision Surfaces <i>Zapletal, Jan ; Merta, Michal</i>	

Session: I-03 Industrial Applications				Room: 02.1
Chair: Paulo Lyra				
Hours	ID	Speaker	Title	
16:15- 16:35	5464	Holopainen, Sami K	A Model for Scheduling using Supplier/Vendor Selection <i>Holopainen, Sami K</i>	
16:35- 16:55	5656	Mavromatisdis, Georgios	Multi-Objective Optimization to Simultaneously Address Energy Hub Sizing, Layout and Scheduling using a Linear Formulation <i>Mavromatisdis, Georgios ; Evins, Ralph ; Orehounig, Kristina ; Dorer, Viktor ; Carmeliet, Jan</i>	
16:55- 17:15	6363	Ali, Abdalla	Dynamic Job Shop Scheduling with Alternatives Routes based on Genetic Algorithm <i>Ali, Abdalla ; Hackney, Phil ; Birkett, Martin ; Bell, David</i>	
17:15- 17:35	5757	Donoso- Bravo, Andrés	Optimization In Biogas Processes Production. The Importance of Global Sensitivity Analysis, Optimization Procedure and Uncertainty Analysis <i>Donoso-Bravo, Andrés ; Carrera-Chapela, Fabio ; Ruiz-Filippi, Gonzalo</i>	
17:35- 17:55				



Session: S-01 Sensitivity Analysis				Room: VA.1
Chair: Alejandro Diaz				
Hours	ID	Speaker	Title	
16:15-16:35	5876	Sigmund, Ole	A Comparison of SIMP, Topological Derivatives and Other Topology Optimization Approaches <i>Sigmund, Ole</i>	
16:35-16:55	5630	Lavasan, Arash	Sensitivity Analysis of the Model Response In Mechanized Tunnelling Simulation - A Case Study Assessment <i>Zhao, Chenyang ; Lavasan, Arash A; Schanz, Tom</i>	
16:55-17:15	5642	Plazaola, Carlos R	Sensitivity Analysis of the Stability of Buried Anisotropic Material Circular Cylindrical Shells Including Soil Interaction <i>Plazaola, Carlos R; Medina, Ana E</i>	
17:15-17:35	5858	Lise, Noël	Shape Optimization of Bimaterial (Micro)Structures Using XFEM and a Level Set Description <i>Lise, Noël ; Pierre, Duysinx</i>	
17:35-17:55	5396	Sammani D	A Revised Vertex Enumeration Algorithm Via Dual Fourier-Motzkin Elimination Method: <i>Abdullahi, Sammani D</i>	

Session:MS6-02 MS06 - Inverse Problems in Engineering				Room: VA.2
Chair: Schalk Kok, Daniel N. Wilke				
Hours	ID	Speaker	Title	
16:15-16:35	5651	Colaco, Marcelo J	Bayesian Estimate of Mass Fraction of Burned Fuel in Internal Combustion Engines Using Pressure Measurements <i>Estumano, Diego C; Hamilton, Fabiana C; Colaco, Marcelo J; Leiroz, Albino JK; Carvalho, Rogerio N; Dulikrovich, George S; Orlande, Helcio RB</i>	
16:35-16:55	5657	Silva, Tiago A. N.	Probability Distribution Estimation Based on Experimental Variability using Differential Evolution <i>Silva, Tiago A. N.; Loja, Maria A. R. ; Carvalho, Alda ; Maia, Nuno M. M. ; Barbosa, Joaquim I.</i>	
16:55-17:15	5753	Kolodziej, Jan	Meshless Methods for the Inverse Problem Related to the Determination of Non-Newtonian Fluid Properties from the Volume Flow Experiment <i>Mierzwiczak, Magdalena ; Grabski, Jakub ; Kolodziej, Jan K</i>	
17:15-17:35	5797	Francisco, Paulo R. V.	Multicriteria Optimization Techniques Applied To Vehicle Accident Reconstruction <i>Francisco, Paulo R. V.; Dias, Joao M. P.; Sousa, Luis A. G.</i>	
17:35-17:55	5887	Takeda, Norio	Measurement-Simulation Hybrid Modeling for Estimating Unmeasured Responses <i>Takeda, Norio</i>	

Parallel sessions

Tuesday, September 9th, 2014

8:40 - 10:20

Session: D-04 Design Optimization and Inverse Problems				Room: MA
Chair: Andres Tovar				
Hours	ID	Speaker	Title	
08:40-09:00	5553	Igor, Mainenti-Lopes	Application of Generalized Extremal Optimization (GEO) Technique to Design a Orbit Transfer Solar Sail Control System <i>Igor, Mainenti-Lopes ; Luiz, Souza ; Fabiano, Sousa</i>	
09:00-09:20	5676	Benndorf, Joerg	Performance Optimization of Complex Continuous Mining System Using Stochastic Simulation <i>Soleymani Shishvan, Masoud ; Benndorf, Joerg</i>	
09:20-09:40	5810	Choi, Han-Lim	Information-Maximizing Adaptive Design of Experiments for Wind Tunnel Testing <i>Choi, Han-Lim ; Ahn, Jaemyung ; Cho, Doo-Hyun</i>	
09:40-10:00	5935	Ramalhinho, Helena	A Polynomial Algorithm for a Special Case of the One-Machine Scheduling Problem with Time-Lags <i>Ramalhinho, Helena</i>	
10:00-10:20	7047	Tureltaub, S.	Isogeometric Shape Optimization for Time-Dependent Problems <i>Tureltaub, S. ; Wang, Z.P.</i>	

Session: I-04 Industrial Applications				Room: 02.1
Chair: Takanori Ide				
Hours	ID	Speaker	Title	
08:40-09:00	5817	Morvaj, Boran	Optimal Selection and Operation of Distributed Energy Resources for an Urban District <i>Morvaj, Boran ; Evins, Ralph ; Carmeliet, Jan</i>	
09:00-09:20	5408	Othman, Mahmoud Mohamed	A Firefly Based Optimization Technique for Optimal Planning of Voltage Controlled Distributed Generators <i>Othman, Mahmoud Mohamed; El-Kattam, Walid Seif; Hegazy, Yasser Gamal; Abdelaziz, Almoataz Youssef</i>	
09:20-09:40	6762	Alhasan, Ishaq	An Integrated MILP Model for Optimal Operation of a Network of Gas Oil Separation Plants: An Industrial Case Study <i>Alhasan, Ishaq ; Liu, Songsong ; Papageorgiou, Lazaros G.</i>	
09:40-10:00	5958	Hrebicek, Jiri	Optimization of Corporate Performance Using Data Envelopment Analysis with Maple <i>Hrebicek, Jiri ; Chvatalova, Zuzana ; Trenz, Oldrich ; Soukopova, Jana</i>	
10:00-10:20	5423	Veriuzhska, Tetiana Y	Optimization of the Overload-Protection Degree <i>Perelmutter, Anatoly V; Veriuzhska, Tetiana Y</i>	



Session:MS6-03 MS06 - Inverse Problems in Engineering				Room: VA.1
Chair: Schalk Kok, Daniel N. Wilke				
Hours	ID	Speaker	Title	
08:40-09:00	5900	Fernandez de Bustos, Igor	On Introducing Restrictions for Mechanism Design <i>Fernandez de Bustos, Igor ; García Marina, Vanessa ; Ansola, Ruben ; Abasolo, Mikel</i>	
09:00-09:20	5950	Borges, João E.	A New Aerodynamic Inverse Method for the Design of Ducts <i>Borges, João E.</i>	
09:20-09:40	5962	Pinto, Luis	Fall Detection Modeling Based on Inverse Problems <i>Pinto, Luis ; Figueiredo, Isabel ; Kumar, Sunil N.; Leal, Carlos</i>	
09:40-10:00				
10:00-10:20				

Session:MS1-01 MS01 - Topology Optimization For Structural Static and Dynamic Failures				Room: VA.2
Chair: Gil Ho Yoon, Matteo Bruggi				
Hours	ID	Speaker	Title	
08:40-09:00	5563	Kim, Ki Hyun	Research on the Layout of Both Rigid and Porous Materials In the Acoustic Topology Optimization for Noise Barrier <i>Kim, Ki Hyun ; Yoon, Gil Ho</i>	
09:00-09:20	5564	Arimitsu, Yutaka	Optimum Structures of Micropolar Materials Depending on Elastic Constants <i>Arimitsu, Yutaka ; Wu, Zhiqiang ; Sogabe, Yuji ; Kimura, Takuto</i>	
09:20-09:40	5674	Salazar de Troya, Miguel A.	Adaptive Mesh Refinement in Stress-Based Topology Optimization <i>Salazar de Troya, Miguel A.; Tortorelli, Daniel A.</i>	
09:40-10:00	5688	Bruggi, Matteo	A Robust Approach to the Optimization of Structures Made of Unilateral Material <i>Bruggi, Matteo ; Duysinx, Pierre</i>	
10:00-10:20	5908	Kovács, Flórián	Optimal Packages: Binding Regular Polyhedra <i>Kovács, Flórián</i>	

Parallel sessions

Tuesday, September 9th, 2014

10:35 - 12:35

Session: D-05 Design Optimization and Inverse Problems				Room: MA
Chair: Janos Logo				
Hours	ID	Speaker	Title	
10:35-10:55	5529	Gutierrez, Sergio	An overview of Results for Inverse Problems using Small Amplitude Homogenization <i>Gutierrez, Sergio</i>	
10:55-11:15	5612	Inglese, dr Gabriele	Recovering the Functional Form of Nonlinear Heat Transfer by Means of Thermal Imaging <i>Inglese, dr Gabriele</i>	
11:15-11:35	5791	Sobota, Tomasz	Numerical Inverse Method for Determining Heat Flux Distribution on the Combustion Chamber Water Wall <i>Sobota, Tomasz</i>	
11:35-11:55	5839	Libotte, Gustavo B	A Graphic Java Interface for the Calculation of Double Azeotropes by the Inversion of Functions from the Plane to the Plane <i>Libotte, Gustavo B; Platt, Gustavo M; Guedes, Aline D L</i>	
11:55-12:15	5879	Guedes, Aline de Lima	Inversion of Function from the Plane to the Plane to solve Nonlinear Algebraic Systems: Calculating of Double Azeotrope using the Modified Raoult's Law <i>Guedes, Aline de Lima ; Platt, Gustavo Mendes; Neto, Francisco Duarte Moura</i>	
12:15-12:35	5940	Ferreira, Patricia A. D.	Inverse Problems Applied to the Optimization of Numerical Model Validation of Railway Track Dynamic Behavior <i>Ferreira, Patricia A. D.; Maciel, Rui</i>	

Session: I-05 Industrial Applications				Room: 02.1
Chair: Zuzana Dimitrovova				
Hours	ID	Speaker	Title	
10:35-10:55	5600	Wurm, M.Sc. Andreas	Automotive Shift Quality Optimization based on Piecewise Monotone Interpolation of Parameter Characteristics <i>Wurm, M.Sc. Andreas ; Bestle, Prof. Dr.-Ing. habil. Dieter ; Kahlbau, Dr.-Ing. Sebastian</i>	
10:55-11:15	5650	Dias, Pedro H. C.	Automotive Powertrain Optimization by Genetic Algorithm Analysing Transmission Ratios <i>Colherinhas, Gino B.; Dias, Pedro H. C. ; Rodrigues, Anna Paula S. P. ; Diniz, Alberto C. G. C.</i>	
11:15-11:35	5697	Bapst, Roman	Model-Linearisation Strategies for MPC of the Air-Path of a Diesel Engine <i>Bapst, Roman ; Jakob, Marcel ; Asprion, Jonas ; Guzzella, Lino</i>	
11:35-11:55	5698	Carvalheira, Pedro de F. V.	Optimization of the Fuel Consumption of M3165 Four-Stroke Internal Combustion Engine <i>Carvalheira, Pedro de F. V.; Nunes, Jorge Miguel F.</i>	
11:55-12:15	5816	Centeno, Felipe FOCEG	Optimizing Parameters of a Downdraft Biomass Gasifier <i>Centeno, Felipe FOCEG; Arruda, Karina KAA; Lora, Electo EESL; Gonçalvez, Jose JLG</i>	
12:15-12:35	5907	Cada, Roman	Designing and Optimizing Nuclear Fuel Loadings <i>Cada, Roman</i>	



Session: N-03 Numerical Optimization Techniques				Room: VA.1
Chair: Pierre Duysinx				
Hours	ID	Speaker	Title	
10:35- 10:55	5506	Secchi, Argimiro R	A Comparative Study Between Wavelet-Adaptive Multiple Shooting and Single Shooting Implemented in a Matlab-EMSO Environment <i>Santos, Lizandro S; Secchi, Argimiro R; Biscaia Jr., Evaristo C</i>	
10:55- 11:15	5678	Roche, Jean R.	Interior Point Method for Nonlinear Semidefinite Programming, Convergence Analysis and Numerical Results in Structural and Multidisciplinary Optimization <i>Roche, Jean R.; Herskovits, José; Bazan, Elmer; Aroztegui, Miguel</i>	
11:15- 11:35	5685	Smietanski, Marek J	An Exponential Generalized Newton Method for Solving Unconstrained Optimization Problems <i>Smietanski, Marek J</i>	
11:35- 11:55	5763	Costanzo, Stefano	MOGASI: A Multi-Objective Genetic Algorithm for Efficiently Handling Constraints and Diversified Decision Variables. <i>Costanzo, Stefano ; Castelli, Lorenzo ; Turco, Alessandro</i>	
11:55- 12:15	5937	Tobias, Linke	Recent Advances in the Solution of Large Nonlinear Optimisation Problems with WORHP <i>Tobias, Linke ; Dennis, Wessel ; Christof, Büskens</i>	
12:15- 12:35	5965	Goulart, Evandro	Large Scale Sparse Nonlinear Constrained Optimization based on FAIPA, the Feasible Arc Interior Point Algorithm <i>Goulart, Evandro ; Herskovits, José</i>	

Session:MS1-02 MS01 - Topology Optimization For Structural Static and Dynamic Failures				Room: VA.2
Chair: Gil Ho Yoon, Matteo Bruggi				
Hours	ID	Speaker	Title	
10:35- 10:55	5474	Michailidis, Georgios	Comparison of Formulations and Strategies for Thickness Control in Shape and Topology Optimization Via a Level-Set Method <i>Allaire, Gregoire ; Jouve, Francois ; Michailidis, Georgios</i>	
10:55- 11:15	5523	Diaz, Alejandro R	A 3D Printing Model Suitable for Topology Optimization <i>Diaz, Alejandro R ; Akandeh, Atra ; Kwon, Patrick</i>	
11:15- 11:35	5544	Rozvany, George I. N	Major Advances in Exact Structural Topology Optimization: Stress and Displacement Based Multi-Load Design <i>Rozvany, George I. N.; Pomezanski, Vanda O.; Sokol, Tomasz ; Pintér, Erika</i>	
11:35- 11:55	5568	Aulig, Nikola	Towards Multi-objective Topology Optimization of Structures Subject to Crash and Static Load Cases <i>Aulig, Nikola ; Nutwell, Emily ; Menzel, Stefan ; Detwiler, Duane</i>	
11:55- 12:15	5586	Christiansen, Asger N.	Combined Shape and Topology Optimization for Minimization of Von Mises Stress <i>Christiansen, Asger N.; Tortorelli, Daniel A.; Aage, Niels ; Sigmund, Ole</i>	
12:15- 12:35	5813	Sokol, Tomasz	New Numerical and Exact Solutions of Generalized Michell Trusses Subject to Multiple Load Cases <i>Sokol, Tomasz</i>	

Parallel sessions

Tuesday, September 9th, 2014

14:00 - 16:00

Session: D-06 Design Optimization and Inverse Problems				Room: MA
Chair: Daniel Tortorelli				
Hours	ID	Speaker	Title	
14:00-14:20	5416	Hallak , Patrícia Habibi	A Genetic Algorithm for Optimization of Spatial Trusses Considering Self-Weight Loads <i>Lemonge, Afonso Celso de Castro Lemonge C.C.; Patrícia, Patrícia Habibi Hallak ; Helio, Helio José Corrêa Barbosa ; Goliatt, Leonardo Goliatt da Fonseca</i>	
14:20-14:40	5594	Logo, Janos	Optimal Design of Curved Folded Plates by Optimality Criteria Method <i>Balogh, Bence ; Logo, Janos</i>	
14:40-15:00	5780	Kanno, Yoshihiro	A Mixed-Integer Programming Approach to Design of Periodic Structures with Negative Thermal Expansion <i>Hirota, Masayuki ; Kanno, Yoshihiro</i>	
15:00-15:20	5979	Dzierzanowski , Grzegorz	Multiphase Elastic Structures of Minimal Compliance <i>Cherkaev, Andrey ; Dzierzanowski, Grzegorz</i>	
15:20-15:40	6362	Jensen, Hector A.	Component Mode Synthesis Techniques For Reliability-Based Design Optimization Of Large Scale Structural Models <i>Jensen, Hector A.</i>	
15:40-16:00	5482	Jahjouh, Mahmoud M	Structural Identification of Two Dimensional Shear Buildings using a Modified Adaptive Harmony Search Algorithm <i>Jahjouh, Mahmoud M; Nackenhorst, Udo</i>	

Session: I-06 Industrial Applications				Room: 02.1
Chair: Argimiro Secchi				
Hours	ID	Speaker	Title	
14:00-14:20	5389	Lacor, Chris	The Potential of Support Vector Machines and Kriging in Modelling the Gas Cyclone Performance <i>Elsayed, Khairy ; Vucinic, Dean ; Lacor, Chris</i>	
14:20-14:40	5468	Reis, Renata Lins	Optimization of a Silver Catalyzed Formaldehyde Plant Using Artificial Neural Networks <i>Reis, Renata Lins; Fontes, Raony Maia; Kalid, Ricardo de Araujo; Fernandes, John Kennedy de Oliveira; Pontes, Karen Valverde</i>	
14:40-15:00	5727	Carvalho, Sandra S H	Mixture Optimization and Analysis of the Chemical Behavior of Different Types of Ethanol For Export <i>Soletti, João Ináci ; Carvalho, Sandra S H V; Pedulla, Maria Clara O</i>	
15:00-15:20	5744	Luz Junior, Luiz F. L.	Achievement of Metamodels for Optimization of Methylamines Production Process through Computer Aided Design <i>Machado, Alex V. L.; Leitoles, Delano P.; Lenzi, Marcelo K.; Yamamoto, Carlos I.; Luz Junior, Luiz F. L.</i>	
15:20-15:40	5982	Ivanov, Kirill S	Basics of Optimal Design and Functional Parameters Evaluation for Crushing and Sorting Process Chains in Mining Industry <i>Ivanov, Kirill S; Mezenin, Anton ; Vaisberg, Leonid A</i>	
15:40-16:00	5574	Lopes, Manuel Pereira	Optimization of Storage Space in Ports' Cereal Storage Silos - A Case Study <i>Cardoso, Mónica Glória; Ferreira, Eduarda Pinto; Lopes, Manuel Pereira; Lopes, Jorge Cardia</i>	



Session: N-04		Numerical Optimization Techniques		Room: VA.1
Chair: Sergio Gutierrez				
Hours	ID	Speaker	Title	
14:00-14:20	5548	Pellegrini, Riccardo	Application of Derivative-Free Multi-Objective Algorithms to Reliability-Based Robust Design Optimization of a High-Speed Catamaran in Real Ocean Environment <i>Pellegrini, Riccardo ; Rinaldi, Francesco ; Campana, Emilio ; Diez, Matteo F.; Fasano, Giovanni ; Iemma, Umberto ; Liuzzi, Giampaolo ; Lucidi, Stefano</i>	
14:20-14:40	5567	Bakker, Craig	Multi-Objective Optimization, MDO and Differential Geometry Controlled Pareto Front Solution Spacing <i>Bakker, Craig ; Parks, Geoffrey</i>	
14:40-15:00	5580	Wang Mengyun	A Study on Multidisciplinary Design Optimization Method for Unmanned Underwater Vehicle <i>Wang, Mengyun; Wei, Zifan; Yu, Qiang ; Yang, Songlin</i>	
15:00-15:20	5777	de Oliveira, Leonardo C	Use of Evolutionary Dynamic Weighted Aggregation for the solutions of Robust Design Optimization <i>de Oliveira, Leonardo C; Monteiro, Hugo VQ; Afonso, Silvana MB</i>	
15:20-15:40	5803	Medina, Juan C	Optimization under Uncertainty through Adaptive Kriging Metamodelling in Augmented Input Space <i>Medina, Juan C; Taflanidis, Alexandros A</i>	
15:40-16:00	5933	Chung, Joon	Aircraft Derivative Design Optimization Process with Uncertainty of Analysis Tools <i>Park, Hyeong-Uk ; Chung, Joon ; Lee, Jae-Woo ; Neufeld, Daniel</i>	

Session: MS5-01		MS05 - Optimization of Laminated Composite Structures		Room: VA.2
Chair: H.C. Rodrigues, A.L. Araujo				
Hours	ID	Speaker	Title	
14:00-14:20	5819	Lund, Erik	On Discrete Material and Thickness Optimization of Laminated Composite Structures using Filters <i>Sørensen, René ; Lund, Erik</i>	
14:20-14:40	5915	Figueiredo de Sá, Ricardo	Multi-Objective Optimization of a 3D Composite Structure <i>Figueiredo de Sá, Ricardo ; van Hattum, Ferrie W.J.; Sá, César J. M. A.; Nunes, J.P.</i>	
14:40-15:00	5469	Ferreira, Rafael T L	Hierarchical Optimization of Fiber Reinforced Composites for Natural Frequencies <i>Ferreira, Rafael T L ; Rodrigues, Helder C; Guedes, José M</i>	
15:00-15:20	5711	Faria, Alfredo R	Optimization of Composite Structures under Multiple Load Cases using a Discrete Approach Based on Lamination Parameters <i>Faria, Alfredo R</i>	
15:20-15:40	6290	Rezaei, Sepideh	Multi Objective Optimization of Laminated Composite Materials with Weight and Reliability Objective Functions <i>Rezaei, Sepideh ; Jalaei Zadeh, Mohammad Foad</i>	
15:40-16:00				

Parallel sessions

Tuesday, September 9th, 2014

16:15 – 17:55

Session: D-07 Design Optimization and Inverse Problems				Room: MA
Chair: Martin Bendsoe				
Hours	ID	Speaker	Title	
16:15- 16:35	5531	Pedersen, Niels L	On Optimization of Internal/External Spur Gears Tooth Bending Strength <i>Pedersen, Niels L</i>	
16:35- 16:55	5841	Rayneau- Kirkhope, Daniel	Optimization of Hierarchical Structures for Withstanding Gentle Compressive Loads <i>Rayneau-Kirkhope, Daniel ; Farr, Robert ; Mao, Yong</i>	
16:55- 17:15	5860	Hedaya, Mohammed M.	Weight Minimization of Truss Structures Subjected to Dynamic Loading <i>Hedaya, Mohammed M. ; Elsabbagh, Adel M. ; Hussein, Ahmed M.</i>	
17:15- 17:35	5588	Messager, Tanguy	Numerical Direct Evolutionary Identification of Constitutive Semi-Crystalline Polymer Model Parameters <i>Abdul-Hameed, Hemin ; Messager, Tanguy ; Zaïri, Fahmi ; Nait-Abdelaziz, Moussa</i>	
17:35- 17:55	5541	Daróczy, László	Optimizing the External Geometry of a Pick-up Tube for a Pitot-Tube-Jet Pump <i>Meyer, Jan ; Daróczy, László ; Janiga, Gábor ; Thévenin, Dominique</i>	

Session: I-07 Industrial Applications				Room: 02.1
Chair: Jiri Hrebicek				
Hours	ID	Speaker	Title	
16:15- 16:35	5528	Ahn, Jiwoong	Polymer Electrolyte Fuel Cell Performances Enhanced by Under-Rib Convection <i>Ahn, Jiwoong; Lee, Jungkoo; Nguyen, Duy Vinh; Park, Sangki; Kim, Hyung-Man; Choi, Kap-Seung</i>	
16:35- 16:55	5573	Sabartova, Zuzana	An Optimization Model for Truck Tyres' Selection <i>Sabartova, Zuzana ; Lindroth, Peter</i>	
16:55- 17:15	5954	Taler, Jan	Optimum Heating of the Boiler Evaporator Taking into Account Thermal Stresses <i>Taler, Jan ; Taler, Dawid ; Dzierwa, Piotr ; Harchut, Piotr</i>	
17:15- 17:35	5864	Wu, Zhiqiang	An Approach to Optimal Design of Golf Clubhead with Considering off-Center Shot <i>Wu, Zhiqiang ; Sogabe, Yuji ; Arimitsu, Yutaka ; Tamaogi, Takayuki</i>	
17:35- 17:55	5969	Arzate Salgado, Juan Antonio	Modeling and Parameter Estimation of a Biogas Pilot-Plant Operated with Maize Silage using a Two-Step Model <i>Arzate Salgado, Juan Antonio; Cruz Bournazou, Mariano N; Kirstein, Max ; Neubauer, Peter ; Junne, Stefan ; Habermann, Boris</i>	



Session:MS2-01 MS02 - Optimization in Oil and Gas Industries				Room: VA.1
Chair: Silvana Bastos, Bernardo Horowitz				
Hours	ID	Speaker	Title	
16:15-16:35	5409	Horowitz, Bernardo	A Multifidelity Approach to Waterflooding Optimization <i>Fragoso, Manuel ; Horowitz, Bernardo ; Rodrigues, José Roberto</i>	
16:35-16:55	5426	Afonso, Silvana MB	Multicriteria Solutions for Optimum Reservoir Management <i>Afonso, Silvana MB; De Oliveira, Leonardo C; Pinto, Jefferson WO; Horowitz, Bernardo ; Willmersdorf, Ramiro B</i>	
16:55-17:15	5488	Eduardo, Camponogara	An MILP Formulation for Scheduling Oil Tankers for Offloading Operations with Variable Travel Time <i>Leonardo, de Assis S.; Eduardo, Camponogara ; Agustinho, Plucenio</i>	
17:15-17:35	5622	Lenz, Ralf	Optimal Extension of Gas Transmission Networks <i>Lenz, Ralf ; Schwarz, Robert ; Serrano, Felipe</i>	
17:35-17:55	5661	Fabiany, Fabiany Lamboia L., F.	A Modified Shuffled Frog-Leaping Algorithm to Model Products Transport in Pipeline Networks <i>Fabiany, Fabiany Lamboia L., F.; Valéria, Lúcia Valéria Ramos de Arruda A., L. V.; Flávio, Flávio Neves Jr. N. Jr, F.</i>	

Session:MS5-02 MS05 - Optimization of Laminated Composite Structures				Room: VA.2
Chair: H.C. Rodrigues, A.L. Araujo				
Hours	ID	Speaker	Title	
16:15-16:35	5569	Piotr, Kedziora	Optimal Design of Composite Structures Subjected to Fatigue Loading in a Fuzzy Environment <i>Piotr, Kedziora ; Muc, Aleksander</i>	
16:35-16:55	5726	Oganesyan, Paul A.	Reducing of the Stress Concentration Near Mounting Zones of the Wind Turbine Composite Blade <i>Oganesyan, Paul A.; Zhilyaev, Igor V.; Shevtsov, Sergey N.; Wu, Jing K.; Huang, Jyun P.; Shevtsova, Varvara S.</i>	
16:55-17:15	6084	Madeira, Jose F.A.	Multiobjective Optimization of Damped Composite Sandwich Structures <i>Madeira, Jose F.A.; Araujo, Aurelio L.; Mota Soares, Cristovao M.; Mota Soares, Carlos A.</i>	
17:15-17:35	6056	Rodrigues, Gonçalo P	Combined Topology and Stacking Sequence Optimization of Composite Laminated Structures for Structural Performance Measures. <i>Rodrigues, Gonçalo P; Guedes, José M; Folgado, João</i>	
17:35-17:55	6023	Jalaei Zadeh, Mohammad Foad	Comparison of Optimization Methods for Weight Minimization of Laminated Composite Panels <i>Jalaei Zadeh, Mohammad Foad ; Gharavi, A R</i>	

Parallel sessions

Wednesday, September 10th, 2014

8:40 – 10:20

Session: D-08 Design Optimization and Inverse Problems				Room: MA
Chair: Niels Pedersen				
Hours	ID	Speaker	Title	
08:40-09:00	5491	Brochier, Felipe O. B.	Optimization af an Unitary Split System Air Conditioner with Variable Refrigerant Flow <i>Brochier, Felipe O. B.; Indrusiak, Maria L. S.; Wander, Paulo R.</i>	
09:00-09:20	5587	Stoerkle, Johannes	Optimization and Investigation of the Dynamical-optical Behavior of Mirror Systems <i>Stoerkle, Johannes ; Wengert, Nicolai ; Eberhard, Peter</i>	
09:20-09:40	5705	Wais, Piotr	Opitmization of a Car Radiator Fin Shape <i>Wais, Piotr</i>	
09:40-10:00	5592	Rodrigues, Simão Santos	Design of After-Market Wind Turbine Blade add-ons for Noise Reduction <i>Rodrigues, Simão Santos; Marta, André Calado</i>	
10:00-10:20	5945	Ocal, Arda	Determination of Layer Properties for Full Depth Asphalt Pavements Using Artificial Neural Network Based Gravitational Search Algorithm <i>Ocal, Arda ; Pekcan, Onur</i>	

Session: I-08 Industrial Applications				Room: 02.1
Chair: Masao Arakawa				
Hours	ID	Speaker	Title	
08:40-09:00	5662	Yi, Sung	Design Optimization of Silicon Condenser Microphone <i>Yi, Sung</i>	
09:00-09:20	5771	Köthe, Thomas	Shape Optimization of Aircraft Cabin Ventilation Components using Adjoint CFD <i>Köthe, Thomas ; Herzog, Sebastian ; Wagner, Claus</i>	
09:20-09:40	5807	Panek, David	Shape Optimization of Inductors for Preheating Before Laser Welding and Hardening. <i>Panek, David ; Kotlan, Vaclav ; Dolezel, Ivo ; Hamar, Roman ; Pavel, Kus</i>	
09:40-10:00	6094	Demet, Seyit Mehmet	Experimental Study Optimized with Taguchi Method of Wear Behaviors of Reinforced PTFE Alloy Pivot Pin Bearings <i>Imrek, Hüseyin ; Demet, Seyit Mehmet</i>	
10:00-10:20	6304	Firat, Veysal	Determination of Sliding Ratio of V-Belt Pulley Mechanisms by Optimizing the Belt Tension <i>Firat, Veysal ; Imrek, Huseyin</i>	



Session:MS4-01 MS04 - Optimization Methods in Biomechanics and Biomedical Engineering				Room: VA.1
Chair: P.R. Fernandes, J. Folgado				
Hours	ID	Speaker	Title	
08:40-09:00	5794	Ruben, Rui B.	Optimization of Mandibular Symphysis Plates Positioning <i>Ruben, Rui B.; Dinis, Jairson C.; Kemmoku, Daniel T.; Noritomi, Pedro Y.; Silva, Jorge V.L.</i>	
09:00-09:20	5957	Lino, Jorge	A Framework for Custom Design and Fabrication of Cranio-Maxillofacial Prostheses using Investment Casting <i>Csáky, Viktor; Neto, Rui; Duarte, Teresa J.; Couto, Mafalda P.; Machado, Margarida; Lino, Jorge</i>	
09:20-09:40	5975	Ribeiro, Nelson S.	Parametric Optimization of Coronary Stents based on Finite Element Models <i>Ribeiro, Nelson S.; Folgado, João O.; Rodrigues, Hélder C.</i>	
09:40-10:00	6033	Maranha, Vitor	External Fixator Configurations in Tibia Fractures - Numerical Optimization and Experimental Validation <i>Maranha, Vitor; Samarra, Miguel; Neto, Augusta; Amaro, Ana; Roseiro, Luis</i>	
10:00-10:20	6049	Almeida, Henrique A	Structural and Vascular Evaluation of Polymer Degrading Scaffolds <i>Almeida, Susana R.; Freitas, Dino M.; Almeida, Henrique A.; Bárto, Paulo J</i>	

Session:MS3-01 MS03 - New Advances in Derivative-Free Optimization Methods for Engineering Optimization				Room: VA.2
Chair: Ana Custódio				
Hours	ID	Speaker	Title	
08:40-09:00	5470	Kux, Steffen	Hybrid Multi-Criterion Optimization Strategies for Complex Technical Problems <i>Kux, Steffen</i>	
09:00-09:20	5865	Kaliszewski, Ignacy	Pareto Suboptimal Designs with Assessments of the Pareto Optimality Gaps <i>Kaliszewski, Ignacy; Kiczkowiak, Tomasz; Miroforidis, Janusz</i>	
09:20-09:40	5878	Regis, Rommel G	A Radial Basis Function Algorithm for Constrained Expensive Multi-Objective Optimization <i>Regis, Rommel G</i>	
09:40-10:00	5693	Pires, Tiago T.	Structural Optimization of a Joined Wing Aircraft using DMS Algorithm <i>Pires, Tiago T.; Madeira, J. F. A.; Suleman, Afzal</i>	
10:00-10:20				

Parallel sessions

Wednesday, September 10th, 2014

10:35 – 12:35

Session: D-09			Design Optimization and Inverse Problems	Room: MA
Chair: Erik Lund				
Hours	ID	Speaker	Title	
10:35-10:55	5411	Pedersen, Pauli	Design of Material Anisotropy Constitutive Matrices for Structural Stiffness and Strength Optimization <i>Pedersen, Pauli ; Pedersen, Niels</i>	
10:55-11:15	5551	Barbarosie, Cristian	Multi-Objective Optimization of Composite Materials with Negative Poisson Ratios <i>Barbarosie, Cristian ; Toader, Anca-Maria ; Lopes, Sérgio</i>	
11:15-11:35	6313	Dimitrovová, Zuzana	Optimization of a Material with a Negative Stiffness Provided by an Inherent Bistable Element <i>Heczko, Jan ; Dimitrovová, Zuzana ; Rodrigues, Hélder</i>	
11:35-11:55	5889	Hao, Junhong	Porosity Distribution Optimization in Insulation Materials by the Variational Method <i>Hao, Junhong ; Chen, Qun ; Hu, Kang</i>	
11:55-12:15	6021	Tovar, Andres	Optimization of Heterogeneous Microstructure Using Statistical and Physical Descriptors within a Cellular Automaton Reconstruction Framework <i>Emami, Anahita ; Wu, Tong ; Tovar, Andres</i>	
12:15-12:35	5670	Boussaa, Djaffar	Optimization of Thermoelastic Functionally Graded Materials using a Nonsmooth Newton Method <i>Boussaa, Djaffar</i>	

Session: I-09			Industrial Applications	Room: 02.1
Chair: Mattia Padulo				
Hours	ID	Speaker	Title	
10:35-10:55	5495	Couceiro, Iván	Structural Optimization of Power Transmission Towers using the Simulated Annealing Algorithm <i>Couceiro, Iván ; Martínez, Santiago ; París, José ; Colominas, Ignasi ; Navarrina, Fermín ; Casteleiro, Manuel</i>	
10:55-11:15	5634	Brudlo, Krzysztof	Biomimetic Structural Optimization Technique in Multiphysics Industrial Application <i>Nowak, Michał S; Hausa, Hubert ; Roszak, Robert ; Morzynski, Marek ; Brudlo, Krzysztof</i>	
11:15-11:35	5694	Ide, Takanori	Structural Optimization Methods to Design Light Weight Automatic Transmission of Vehicles with Low Radiated Noise <i>Ide, Takanori ; Otomori, Masaki ; Leiva, Juan Pablo; Watson, Brian C</i>	
11:35-11:55	5742	Lyra, Paulo Roberto M.	Design Optimization of Equivalent Mooring System on Truncated Depth <i>Ferreira, Fábio Martins Gonçalves; Lages, Eduardo N.; Afonso, Silvana Maria B.; Lyra, Paulo Roberto M.</i>	
11:55-12:15	5808	Jakubek, Daria	Adjoint-Based Shape Optimization of High-Speed Trains <i>Jakubek, Daria ; Herzog, Sebastian ; Wagner, Claus</i>	
12:15-12:35	5814	Mankovits, Tamás	SVR And FEA Based Shape Optimization on Air Spring Bumpers <i>Mankovits, Tamás ; Kocsis, Imre ; Szabó, Tamás ; Vámosi, Attila ; Huri, Dávid</i>	



Session: N-05 Numerical Optimization Techniques				Room: VA.1
Chair: Jean Roche				
Hours	ID	Speaker	Title	
10:35- 10:55	5578	Singh, Pushpinder	Solving Dual Hesitant Fuzzy Assignment Problem with Restrictions using Similarity Measure <i>Singh, Pushpinder</i>	
10:55- 11:15	5633	Schwarz, Colin	Real-Time Optimization by Indirect NMPC Methods <i>Schwarz, Colin ; Callies, Rainer ; Szabo, Andrei</i>	
11:15- 11:35	5637	Abebe, Geletu	Coupling Analytic Approximation with Polynomial Chaos Collocation to Tackle Non-Convex Chance Constraints in Control Engineering Applications <i>Abebe, Geletu ; Pu, Li</i>	
11:35- 11:55	5645	Torres- Guardia, Luis Torres Guardia LETG	Multi-Stage Stochastic Distribution Model <i>Torres-Guardia, Luis Torres Guardia LETG; Guillen de Torres, Tania Guillen de Torres TZGT</i>	
11:55- 12:15	5686	Bauma, Elisabeth	A Novel Hybrid Method for Optimal Control Problems and its Application to Trajectory Optimization in Micro Manufacturing <i>Bauma, Elisabeth ; Schuster, Thomas</i>	
12:15- 12:35	5746	Montanher, Tiago M	Global Estimation of Hidden Markov Models using Interval Arithmetic <i>Montanher, Tiago M; Mascarenhas, Walter F</i>	

Session:MS3-02 MS03 - New Advances in Derivative-Free Optimization Methods for Engineering Optimization				Room: VA.2
Chair: José Aguilar Madeira				
Hours	ID	Speaker	Title	
10:35- 10:55	5530	Carro-Calvo, Leopoldo	Global Optimization Design for Expensive Computational Simulations in Aerodynamics using a Novel Surrogate Model Approach: The Intelligent Estimation Search with Sequential Learning (IES-SL). <i>Carro-Calvo, Leopoldo ; Andrés-Pérez, Esther ; Salcedo-Sanz, Sancho ; Martin Burgos, Mario</i>	
10:55- 11:15	5834	Ayres, José Eduardo A.	A New Multimodal Hybrid Differential Evolution Applied to Parameter Estimation in Vapor-Liquid Equilibrium Problem <i>Ayres, José Eduardo A.; Domingos, Roberto P.; Platt, Gustavo M.</i>	
11:15- 11:35	5526	Larson, Jeffrey	Multi-start, Model-based Derivative-free Optimization <i>Larson, Jeffrey ; Wild, Stefan</i>	
11:35- 11:55	5654	Custodio, Ana Luisa	GLODS: Clever Multistart in Directional Direct Search <i>Custodio, Ana Luisa ; Madeira, Jose Aguilar</i>	
11:55- 12:15	5708	Ambrosio, Jorge	Optimal Railway Vehicle Suspension Design for Improved Running Safety <i>Magalhaes, Hugo; Madeira, José FA; Ambrosio, Jorge ; Pombo, Joao</i>	
12:15- 12:35				

Parallel sessions

Wednesday, September 10th, 2014

14:00 – 16:00

Session: D-10 Design Optimization and Inverse Problems				Room: MA
Chair: Jorge Belinha				
Hours	ID	Speaker	Title	
14:00-14:20	5904	António, Carlos AC	Determination of Peel Strength Based on Composition of Adhesives for the Footwear Industry using Genetic Algorithm <i>Paiva, Rosa MM; António, Carlos AC; Silva, Lucas FM</i>	
14:20-14:40	5712	Canelas, Alfredo	Inductors Optimal Design in Three-Dimensional Electromagnetic Shaping Problems <i>Canelas, Alfredo ; Roche, Jean R</i>	
14:40-15:00	5748	Osmar, Osmar Francisco Reis Silva OFRS	Hybrid Optimization Algorithm Applied on Multistage Axial Compressor Performance Calculations with Variable Geometry <i>Osmar, Osmar Francisco Reis Silva OFRS; Tomita, Jesuino takachi Tomita JTT; Bringhenti, Cleverson Bringuenthi CB; Cavalva, Diogo Ferraz cavalca DFC</i>	
15:00-15:20	5759	Martins, Gustavo C.	Piezoelectric Speaker Optimization for Hearing Aid Application through Multi-Physical FE Models <i>Martins, Gustavo C.; Nunes, Paulo R.; Cordioli, Júlio A.</i>	
15:20-15:40	5869	Morga, Mariantonietta	Optimal Design of Tuned Mass Dampers under Non-Stationary Random Excitation <i>Morga, Mariantonietta ; Greco, Rita ; Marano, Giuseppe C</i>	
15:40-16:00	5913	Khominich, Dmitry	Quest of Optimal Polyurethane Damper Geometry <i>Khominich, Dmitry</i>	

Session: I-10 Industrial Applications				Room: 02.1
Chair: Moacir Kripka				
Hours	ID	Speaker	Title	
14:00-14:20	5368	Sousa, Filipe	Topology Optimization Studies on Wing Morphing Compliant Edges <i>Sousa, Filipe ; Lau, Fernando ; Suleman, Afzal</i>	
14:20-14:40	5741	Meindlhummer, Martin	Towards a Monolithic Design of Large Aircraft Wing Spoilers using Numerical Topology and Laminate Optimization <i>Meindlhummer, Martin ; Schagerl, Martin ; Fleischmann, Martin</i>	
14:40-15:00	5822	Melnikovs, Anatolijs	Robust Shape Optimization of Composite Structure Using Metamodels <i>Janushevskis, Alexander ; Melnikovs, Anatolijs ; Janusevskis, Janis</i>	
15:00-15:20	5949	Zur, Sascha	Optimization of the DLR Spaceliner Inside the Integration Environment RCE <i>Zur, Sascha ; Tröltzsch, Anke</i>	
15:20-15:40	5951	Pierre, Duysinx	Shape and Topology Optimization of Lightweight Automobile Transmission Components <i>Pierre, Duysinx ; Emmanuel, Tromme ; Geoffrey, Virlez ; Lise, Noel ; Nicolas, Poulet</i>	
15:40-16:00	5980	Bobby, Sarah	Reliability-Based Topology Optimization for Uncertain Building Systems in Seismic Zones <i>Bobby, Sarah ; Spence, Seymour ; Bernardini, Enrica M. J.; Kareem, Ahsan</i>	



Session: N-06 Numerical Optimization Techniques				Room: VA.1
Chair: Georgios Michailidis				
Hours	ID	Speaker	Title	
14:00-14:20	5534	Ansola Loyola, Ruben	Results Comparison Between the SIMP and SERA Method for Compliant Mechanisms Design <i>Alonso Gordoa, Cristina ; Ansola Loyola, Ruben ; Vegueria Lopez, Estrella ; Querin, Osvaldo</i>	
14:20-14:40	5559	Mrzyglod, Miroslaw W.	The Evolutionary Method For Topology Optimization Of Super-Light Structures <i>Mrzyglod, Miroslaw W.</i>	
14:40-15:00	5570	Kwak, Sung Kyu	Simultaneous Optimization of Loading Point and Structural Topological Layouts for the Design of Loaded Frames <i>Kwak, Sung Kyu ; Kim, Suh In ; Ahn, Byungseong ; Han, Sangmin ; Kim, Yoon Young</i>	
15:00-15:20	5583	Kim, Suh In	Linkage Mechanism Synthesis by Topology Optimization <i>Kim, Suh In ; Kang, Seok Won ; Kim, Yoon Young</i>	
15:20-15:40	5667	Tajs-Zielinska, Katarzyna	Generating Optimal Topologies with Cellular Automata Based on Irregular Lattices <i>Bochenek, Bogdan ; Tajs-Zielinska, Katarzyna</i>	
15:40-16:00	5379	Yoon, Gil Ho	Monolithic FSI Analysis Approach for Stress Based Topology Optimization <i>Yoon, Gil Ho</i>	

Session:MS5-03 MS05 - Optimization of Laminated Composite Structures				Room: VA.2
Chair: H.C. Rodrigues, A.L. Araujo				
Hours	ID	Speaker	Title	
14:00-14:20	6054	Ferreira, Ana L.	Stacking Sequence Optimization for Fiber-reinforced Flat Panels for stiffness and natural vibration frequency criteria. <i>Ferreira, Ana L.; Almas, Miguel M; Guedes, José M; Rodrigues, Helder C</i>	
14:20-14:40	5924	Valido, Anibal Jorge AJ	Optimal Design of Thin-Walled Laminated Beams with Geometrically Nonlinear Behaviour <i>Valido, Anibal Jorge AJ; Barradas Cardoso, João J; Moita, Paulo Jorge PJ</i>	
14:40-15:00	5925	Barradas Cardoso, João J	Optimal Design of Composite Laminated Thin-Walled Cross-Section Properties <i>Barradas Cardoso, João J; Valido, Aníbal Jorge AJ; Moita, Paulo Jorge PJ</i>	
15:00-15:20	6078	Carvalho, Vitor S.	Viscoelastic Material Parameter Estimation in Sandwich Structures <i>Carvalho, Vitor S.; Araujo, Aurelio L.; Maia, Nuno M.M.</i>	
15:20-15:40	5700	Bagci, Mehmet	Determination of Solid Particle Erosion with Taguchi Optimization Approach of Hybrid Composite Systems <i>Bagci, Mehmet</i>	
15:40-16:00	6289	NAIMI, Selmen	A Design Optimization Study af a Partially Damped Sandwich Structure <i>NAIMI, Selmen ; ASSAF, Samir ; HAMDI, Mohamed Ali</i>	

Parallel sessions

Wednesday, September 10th, 2014

16:15 – 17:55

Session: D-11 Design Optimization and Inverse Problems				Room: MA
Chair: Rafael Ferreira				
Hours	ID	Speaker	Title	
16:15- 16:35	5492	Polak, Elijah	On the Use of Min-Max Algorithms in Receding Horizon Control Laws for Harbor Defense <i>Polak, Elijah ; Lee, Seungho ; Walrand, Jean</i>	
16:35- 16:55	5981	Louis, Gosselin	Optimization of Heat Exchangers under Uncertainties <i>Louis, Gosselin ; Julien, Lambert</i>	
16:55- 17:15	6350	Santos, Moises M.	Application of Logic-Structural Matrix in the Allocation Optimization of Devices in Power Systems Distribution <i>Santos, Moises M.; Abaide, A. R.; Sperandio, M. ; Milke, Tafarel F.</i>	
17:15- 17:35	5545	Chang, Chih-Jung	Bi-Objective Wind Farm Optimization with Turbine Blade Design under Uncertainty <i>Chang, Chih-Jung ; Chan, Kuei-Yuan</i>	
17:35- 17:55	5703	Reith, Dirk	New Ethylene Oxide Force Fields via Global and Local Optimization <i>Krämer, Andreas ; Hülsmann, Marco ; Köddermann, Thorsten ; Reith, Dirk</i>	

Session: I-11 Industrial Applications				Room: 02.1
Chair: Carlos Conceicao António				
Hours	ID	Speaker	Title	
16:15- 16:35	5395	Morozov, Valery	Method and System for Control of Flotation Process Based on Preliminary Estimates of Ore Grade <i>Morozov, Valery ; Zorigt, Ganbaatar ; Loday, Delgerbat ; Stiliarov, Valeriy</i>	
16:35- 16:55	5666	Alvarez-Vazquez, Lino J.	Optimal Control in Moving Domains: An Application to Eutrophication <i>Alvarez-Vazquez, Lino J.; Fernandez, Francisco J.; Martinez, Aurea</i>	
16:55- 17:15	5758	Vossen, Georg	Optimal Control for Battery Management Systems <i>Vossen, Georg ; Roos, Dirk ; Struck, Alexander</i>	
17:15- 17:35	5967	Ruiz, Ana B.	Efficient Operation of Power Plants: a Multibjective Optimization Study Based on the Auxiliary Services <i>Ruiz, Ana B. ; Luque, Mariano ; Cabello, Jose M. ; Ruiz, Francisco</i>	
17:35- 17:55	5884	Kripka, Moacir	Minimizing the Environmental Impact f R-C Structural Elements <i>Kripka, Moacir ; Medeiros, Guilherme ; Fraga, José Luis Fleith de; Marosin, Paulo Roberto Tolotti</i>	



Session:MS4-02 MS04 - Optimization Methods in Biomechanics and Biomedical Engineering				Room: VA.1
Chair: P.R. Fernandes, J. Folgado				
Hours	ID	Speaker	Title	
16:15-16:35	5566	Nikitina, Lialia	Local Improvement Algorithm, Nonconvex Pareto Fronts and Applications <i>Clees, Tanja ; Hornung, Nils ; Nikitin, Igor ; Nikitina, Lialia ; Steffes-lai, Daniela</i>	
16:35-16:55	5589	Breen, Alexander Cleveland	A Pre-Operational Study Magnification Measurement and Error Estimation of Residual Tibia Kinematics within Below Knee Prosthetics <i>Breen, Alexander Cleveland ; Dupac, Mihai ; Noroozi, Siamak ; Osborne, Neil</i>	
16:55-17:15	5853	Ribeiro, Frederico O	The Callus Formation in Bone Healing as a Shape Optimization Problem <i>Ribeiro, Frederico O; Fernandes, Paulo R; Folgado, João O; Gómez-Benito, María José ; García-Aznar, José M</i>	
17:15-17:35	5921	Moita, Paulo J P	Limiting Performance Analysis of a Vehicle's Restraint System Including Pre-Acting Control <i>Moita, Paulo J P; Cardoso, João E B; Valido, Aníbal JJ</i>	
17:35-17:55	6007	Belinha, Jorge	The Bone Tissue Trabecular Architecture Prediction using Meshless Methods <i>Belinha, Jorge ; Dinis, Lúcia M.J.S.; Natal Jorge, Renato M.</i>	

Session:MS2-02 MS02 - Optimization in Oil and Gas Industries				Room: VA.2
Chair: Silvana Bastos, Bernardo Horowitz				
Hours	ID	Speaker	Title	
16:15-16:35	5733	Siregar, Septoratno	Pressure Distribution Determination in a Complex Gas Pipeline Network <i>Siregar, Septoratno ; Soewono, Edy ; Sidarto, Kuntjoro</i>	
16:35-16:55	5994	Órfão, Nuno	Scheduling of Branched Multi-Product Pipelines <i>Órfão, Nuno ; Relvas, Susana ; Barbosa-Póvoa, Ana Paula</i>	
16:55-17:15	6025	Tapia, Marta	Optimized Ballast Control in Load-out Operations <i>Tapia, Marta ; Kaleff, Peter ; Garcia, Sandra ; Rodriguez, Juan</i>	
17:15-17:35	6048	Soletti, João Inácio	Helicopter Routing Problem applied to Offshore Platforms <i>Soletti, João Inácio ; Carvalho, Sandra Helena Vieira ; Sousa, Carla Jaciara ; Oliveira Júnior, Antônio Martins</i>	
17:35-17:55	5554	Romero, David G	Determining Optimal Routes to Traverse Block Sets <i>Romero, David G ; Gaona, Silvia M ; Rojano, Miguel A</i>	

Parallel sessions

Thursday, September 11th, 2014

8:40 – 10:20

Session: D-12 Design Optimization and Inverse Problems				Room: MA
Chair: Boyan Lazarov				
Hours	ID	Speaker	Title	
08:40-09:00	5418	Parra-Guevara, David	Existence and Uniqueness of the Regularized Solution in the Problem of Recovery the Non-Steady Emission Rate of a Point Source: Application of the Adjoint Method. <i>Parra-Guevara, David ; Skiba, Yuri ; Reyes-Romero, Arturo</i>	
09:00-09:20	5943	Wang, Qi	Optimal Pitching Axis of Flapping-Wings for Hovering Flight <i>Wang, Qi ; Goosen, Johannes ; van Keulen, Fred</i>	
09:20-09:40	5776	Pinter, Janos D	Global vs. Local Optimization for Parameter Estimation in Engineering Models <i>Pinter, Janos D ; Satish, Mysore G.</i>	
09:40-10:00	5687	Abderrahmane, Habbal	A Nash Game Approach to Solve Elliptic Data Completion Problems <i>Abderrahmane, Habbal ; Moez, Kallel</i>	
10:00-10:20				

Session: I-12 Industrial Applications				Room: 02.1
Chair: Jan Taler				
Hours	ID	Speaker	Title	
08:40-09:00	5616	Ciancio, Claudio	Temperature Prediction in High Speed Incremental Forming Process by Data Mining Technique <i>Ambrogio, Giuseppina ; Ciancio, Claudio ; Filice, Luigi ; Gagliardi, Francesco ; Musmanno, Roberto</i>	
09:00-09:20	5893	Jin, Kai	Residual Stress and Distortion after Ejection for Injection Molded Part with Metal-Insert by the Process Chain Analysis <i>Jin, Kai ; Jeong, Taesan ; Kim, Naksoo</i>	
09:20-09:40	5896	Kim, Taesan	Numerical Analysis and Optimal Design to Reduce Residual Stresses and Deformations of Die Casting Sheets After Ejection <i>Kim, Taesan ; Jin, Kai ; An, Teagen ; Kim, Naksoo</i>	
09:40-10:00	5959	Campos, Hugo RC	On The Optimization and Accuracy of Stress-Strain Curve Determination using Hydraulic Bulge Test <i>Campos, Hugo RC ; Santos, Abel D ; Martins, Bruno ; Barlat, F.</i>	
10:00-10:20	5565	Nikitin, Igor	Extrapolation Check for Metamodel-Driven Optimization <i>Clees, Tanja ; Hüttemann, Martin ; Nikitin, Igor ; Nikitina, Lialia ; Steffes-lai, Daniela</i>	



Session: MS4-03 MS04 - Optimization Methods in Biomechanics and Biomedical Engineering				Room: VA.1
Chair: P.R. Fernandes, J. Folgado				
Hours	ID	Speaker	Title	
08:40-09:00	5796	Quental, Carlos	Optimal Approach to the Human Motion Reconstruction within the Limitation of the Kinematic Data Acquisition Procedures <i>Quental, Carlos ; Folgado, João ; Ambrósio, Jorge ; Monteiro, Jacinto</i>	
09:00-09:20	5942	Silva, Maria Elisabete T.	Optimization of the Mooney-Rivlin Constitutive Model Parameters for the Pelvic Floor Muscles, using an Inverse Method <i>Silva, Maria Elisabete T.; Parente, Marco P.L.; Natal, Renato M.J.; Mascarenhas, Teresa</i>	
09:20-09:40	5995	Rodrigues , Carlos M.B.	Human Optimization of Lower Limb Muscle Stretch Shortening Cycle <i>Rodrigues , Carlos M.B.; Correia, Miguel V.; Abrantes, João M.C.S.; Nadal, Jurandir</i>	
09:40-10:00				
10:00-10:20				

Session: DE-01 Design Optimization and Inverse Problems / Efficient Analysis and Reanalysis Techniques				Room: VA.2
Chair: Marcelo Colaço				
Hours	ID	Speaker	Title	
08:40-09:00	5677	Soleymani Shishvan, Masoud	Long Term Production Planning of Open Pit Mines by Ant Colony Optimization <i>Soleymani Shishvan, Masoud ; Sattarvand, Javad</i>	
09:00-09:20	5486	Miranda, Sofia I	Superquantile Regression with Applications to Buffered Reliability, Uncertainty Quantification, and Conditional Value-at-Risk <i>Rockafellar, R Tyrrell; Royset, Johannes O; Miranda, Sofia I</i>	
09:20-09:40	5938	L.F.P., Etman	Specifying Decomposition Structure in Large-Scale MDO: Revision of the Psi Language using a LED Lighting Design Case <i>T., Wilschut ; A.T., Hofkamp ; L.F.P., Etman ; J.E., Rooda ; A.W.J., Gielen</i>	
09:40-10:00	5835	Domingos, Roberto Pinheiro	A Multimodal Differential Evolutionary Applied to Robotic Navigation Problem <i>Domingos, Roberto Pinheiro; Ayres, José Eduardo Almeida ; Platt, Gustavo Mendes; Neto, Francisco D. M.</i>	
10:00-10:20	5591	Yilmaz, Serhat	A Proposed Annex Architecture for Enhancing Extrapolation Performance of MLP Neural Networks <i>Yilmaz, Serhat ; Ekinci, Onder</i>	

Parallel sessions

Thursday, September 11th, 2014

10:35 – 12:35

Session: D-13 Design Optimization and Inverse Problems				Room: MA
Chair: Joaquim Martins				
Hours	ID	Speaker	Title	
10:35-10:55	5558	Rawdon, Blaine Knight	Design Optimization of the Gossamer Condor and Gossamer Albatross Human-Powered Airplanes <i>Rawdon, Blaine Knight</i>	
10:55-11:15	5614	Afonso, Frederico	Multidisciplinary Performance Based Optimization of Aircraft <i>Afonso, Frederico ; Vale, José ; Lau, Fernando ; Suleman, Afzal</i>	
11:15-11:35	5623	Vale, José Lobo	Stochastic Optimization in Aircraft Design <i>Amândio, Luis Filipe ; Marta, André Calado; Suleman, Afzal ; Afonso, Frederico José; Vale, José Lobo</i>	
11:35-11:55	5702	Burton, Scott A	Air Vehicle Design Optimization using a Multi-Fidelity Model in the Service-Oriented Computing Environment (SORCER) <i>Burton, Scott A</i>	
11:55-12:15	5868	Padulo, Mattia	A Risk-based Approach to Aircraft Design Optimization <i>Padulo, Mattia ; Delbove, Julien</i>	
12:15-12:35	5916	Vale, José L.	Performance Based MDO of a Regional Transport Aircraft with a Joined Wing Configuration <i>Vale, José L.; Afonso, Frederico ; Lau, Fernando ; Suleman, Afzal</i>	

Session: I-13 Industrial Applications				Room: 02.1
Chair: Jorge Ambrósio				
Hours	ID	Speaker	Title	
10:35-10:55	5773	Silva, Marlon da	Optimization Methods Applied to Nonlinear Signal Interference Models <i>Silva, Marlon da; Senne, Edson Luiz França; Vijaykumar, Nandamudi Lankalapalli</i>	
10:55-11:15	5792	Zietarski, Stanislaw	The Combinatorial-Cyclic Method of Optimization (Ccpt) in a Virtual and, Scaled or Full Sized, Physical Prototyping <i>Zietarski, Stanislaw ; Kachel, Stanislaw ; Kozakiewicz, Adam ; Wrzesien, Stanislaw</i>	
11:15-11:35	6004	Q., Catharine Q.	Modeling and Optimization of a Distillation Column using Advanced Optimization Software (ROMeo®) <i>Q., Catharine Q.; P., Karen V.; N., idelfonso B.</i>	
11:35-11:55	6005	Dias, Joao P	Evolutionary Multiobjective Optimization of Multibody Systems with Application to Vehicle Structures under Impact <i>Dias, Joao P; Francisco, Paulo R</i>	
11:55-12:15	5806	Werner, Michael	Unified Suspension Optimization Process Considering Robustness <i>Hahn, Youngwon ; Cofer, Jack ; Choi, Yangwook ; Werner, Michael</i>	
12:15-12:35				



Session: N-07 Numerical Optimization Techniques				Room: VA.1
Chair: Anca Maria Toader				
Hours	ID	Speaker	Title	
10:35- 10:55	5465	Kaneko, Hiromasa	Fast Optimization of Hyperparameters of Support Vector Regression Model Considering its Predictive Ability <i>Kaneko, Hiromasa ; Funatsu, Kimito</i>	
10:55- 11:15	5579	Kuckoski, Adriano	Structural Optimization of Frame Structures by Integer Programming with Failure Constraints <i>Kuckoski, Adriano ; Fonseca, Jun</i>	
11:15- 11:35	5636	Ergünes, Biket	Interval Partitioning Methods for Mixed Integer Nonlinear Problems <i>Ergünes, Biket ; Ozdamar, Linet ; Demir, Onur ; Gülcen, Nur</i>	
11:35- 11:55	5683	Mohamed Amine, Bouhlel	Kriging Combining Partial Least Squares for Optimization in High Dimension <i>Mohamed Amine, Bouhlel ; Nathalie, Bartoli ; Morlier, Joseph ; Otsmane, Abdelkader</i>	
11:55- 12:15	5689	Miranda, Joao	A One-Step Discrete Adjoint-Based Approach for Combined Design Optimization and A Posteriori Error Estimation <i>Miranda, Joao ; Elsayed, Khairy ; Lacor, Chris ; Abraham, Simon</i>	
12:15- 12:35	5804	da Silva Junior, C. A.	A Metric to Assist the Selection of the Particle Swarm Optimization Parameters <i>da Silva Junior, C. A. ; Saba, W. B. ; Abe, N. M. ; Passaro, A.</i>	

Parallel sessions

Thursday, September 11th, 2014

14:00 – 16:00

Session: D-14 Design Optimization and Inverse Problems				Room: MA
Chair: Habbal Abderrahman				
Hours	ID	Speaker	Title	
14:00-14:20	5552	Siegbert, Roland	Development of an Objective Function for Die-Swell in Extrusion Die Design <i>Siegbert, Roland ; Elgeti, Stefanie ; Behr, Marek</i>	
14:20-14:40				
14:40-15:00	5737	Pascu, Adrian	Simulation of Polymeric Membrane in ASPEN Plus for CO2 Post-Combustion Capture <i>Pascu, Adrian ; Badea, Adrian ; Dinca, Cristian ; Stoica, Laurentiu</i>	
15:00-15:20	5882	Xu, Yunchao	Theoretical Analyses in the Influence of Heat and Mass Transfer on the Conversion Rate of Methanol Decomposition <i>Xu, Yunchao ; Chen, Qun</i>	
15:20-15:40	5738	Stoica, Laurentiu	Absorber Design for Improving the CO2 Post-Combustion Capture Efficiency <i>Stoica, Laurentiu ; Badea, Adrian ; Dinca, Cristian ; Pascu, Adrian</i>	
15:40-16:00	5883	Wang, Yifei	Experimental Studies of Central Variable Water Volume Chiller System Optimization for Energy Conservation <i>Wang, Yifei ; Chen, Qun</i>	

Session: I-14 Industrial Applications				Room: 02.1
Chair: Filipa Moleiro				
Hours	ID	Speaker	Title	
14:00-14:20	5519	Jayachandran, K P	Simultaneous Optimization of Orientation and Concentration in Piezoelectric Composites <i>Jayachandran, K P; Guedes, J M; Rodrigues, H C</i>	
14:20-14:40	6055	Matos, Agostinho M	Optimization Computational Model for Piezoelectric Energy Harvesters Considering Material Piezoelectric Microstructure <i>Matos, Agostinho M; Guedes, Jose M; Jayachandran, Kuzhichalil P; Rodrigues, Helder C</i>	
14:40-15:00	5800	Albino, Larissa LAS	Tactical Decision Model for Emergency Response for Oil Spills on The Sea <i>Albino, Larissa LAS; Tapia, Lucio LUC</i>	
15:00-15:20	5983	Badawy, Rashad	Quantum-Inspired Evolution for Smart Building Energy Management in Future Power Networks <i>Badawy, Rashad ; Yassine, Abdulsalam ; Heßler, Axel ; Hirsch, Benjamin ; Albayrak, Sahin</i>	
15:20-15:40	6006	Maia, Ivana Márcia Oliveira	Experimental Methodology for Quantification Analysis of Methane Emission Applied to the Charcoal Production in Laboratory <i>Maia, Ivana Márcia Oliveira; Rodrigues de Carvalho, Solidônio; Borges, Valério Luiz; Pereira de Lima, Euclides Antonio; Mota, Rogério Lima ; Barbosa, Lívia Domingos</i>	
15:40-16:00	5615	Derbala, Ali -	A "2-Jobshop and One Conveyor" Scheduling Problem <i>Bouali, Abdenacer -; Derbala, Ali -; Bouiche, Abdelhak -</i>	



Session: N-08		Numerical Optimization Techniques		Room: VA.1
Chair: Cristian Barbarosie				
Hours	ID	Speaker	Title	
14:00-14:20	5721	Ishibashi, Ken	Application of Cellular Automaton to Combinatorial Optimization Problems <i>Ishibashi, Ken ; Furuta, Hitoshi ; Nomura, Yasutoshi ; Nakatsu, Koichiro ; Takahashi, Kyosuke</i>	
14:20-14:40	5747	Phan, An Thanh	Method of Orienting Curves for Determining Delaunay Triangulations <i>Phan, An Thanh ; Dinh, Giang Thanh; Le, Trang Hong</i>	
14:40-15:00	6014	Ginho, Jorge Cipriano Fernandes dos Santos JCFS	A New Draft of Resolution to the P-Median Problem <i>Ginho, Jorge Cipriano Fernandes dos Santos JCFS</i>	
15:00-15:20	5873	Dolatshah, Azam	Investigation of Energy Dissipation over Stepped Spillways using a Hybrid FV - ANN Technique <i>Dolatshah, Azam ; Imani Khoshkho, Hasan ; Mashal, Mahmoud</i>	
15:20-15:40	5628	Brigadnov, Igor A.	Regularization of Non-Convex Plastic Boundary Value Problems <i>Brigadnov, Igor A.</i>	
15:40-16:00				

Parallel sessions

Thursday, September 11th, 2014

16:35 – 17:55

Session: D-15 Design Optimization and Inverse Problems				Room: MA
Chair: Alfredo Faria				
Hours	ID	Speaker	Title	
16:15- 16:35	5833	Martins, Joaquim R. R. A.	Aircraft Wing Design via High-Fidelity Aerostructural Optimization <i>Martins, Joaquim R. R. A.</i>	
16:35- 16:55	5752	Christiansen, Rasmus E	Benefits and Challenges when Performing Robust Topology Optimization for Interior Acoustic Problems <i>Christiansen, Rasmus E; Jensen, Jakob S; Lazarov, Boyan S; Sigmund, Ole</i>	
16:55- 17:15	5462	Nastase, Adriana	Influence of Start Values of Optimization Over the Global Optimized Shapes of Flying Configurations <i>Nastase, Adriana</i>	
17:15- 17:35	5644	Alghamdi, Saeid A	Durability-Based Design-Optimization of RC Beams and Columns in Corrosive Environments <i>Alghamdi, Saeid A</i>	
17:35- 17:55				

Session: I-15 Industrial Applications				Room: 02.1
Chair: Cristovão Mota Soares				
Hours	ID	Speaker	Title	
16:15- 16:35	5611	Musial, Jedrzej	Online Goods Brokering <i>Musial, Jedrzej</i>	
16:35- 16:55	5832	Bautzer, Claudio C.G.S.B,S	Thermo-Structural Analysis of the Separation System of Satellite Launcher Vehicle Payload for Aluminium and Steel <i>Bautzer, Claudio C.G.S.B,S; Machado, Humberto H.A. M</i>	
16:55- 17:15	5952	Grilo, Teresa TG	Optimal Control of Passive Particles Advection by Two-Dimensional Point Vortices <i>Grilo, Teresa TG; Lobo Pereira, Fernando FLP; Gama, Sílvio SG</i>	
17:15- 17:35	5973	Ahani, Parisa	A New Approach for Optimizing Economic Load Dispatch Problem with Valve-Point Effects <i>Ahani, Parisa</i>	
17:35- 17:55	5999	Montañez- Barragán, Brenda	Optimization of Bioactive Compounds Extraction from Coffee Waste Using Box- Behnken Experimental Design <i>Mirón-Mérida, Vicente ; Montañez-Barragán, Brenda ; Barragán-Huerta, Blanca E</i>	



Session: N-09 Numerical Optimization Techniques				Room: VA.1
Chair: K. Jayachandran				
Hours	ID	Speaker	Title	
16:15- 16:35	5550	Ribau, João P.	Optimization of Financial Savings and Life Cycle CO2 emissions of Hybrid Bus Powertrains Considering the Energy Management Strategy and Design <i>Ribau, João P.; Silva, Carla M.; Sousa, João M.</i>	
16:35- 16:55	5584	Zhang Sheng	Comprehensive Optimization of the Ship Performance for USV and its Methods <i>Zhang Sheng, Yang SongLin, Zhang GongYu, Wen YiYan</i>	
16:55- 17:15	5827	Platt, Gustavo M	Application of the Flower Pollination Algorithm in Nonlinear Algebraic Systems with Multiple Solutions <i>Platt, Gustavo M</i>	
17:15- 17:35	5840	Yavuz, Mehmet	Istanbul Stock Exchange (Bist) Index Prediction With Neural Networks During The Financial Crises <i>Yavuz, Mehmet ; Sakarya, Sakir ; Karaoglan, Aslan Deniz ; Ozdemir, Necati</i>	
17:35- 17:55	5809	Schatz, Markus	Structural design optimization of aerospace structures considering material selection and sizing <i>Schatz, Markus ; Wehrle, Erich ; Baier, Horst</i>	

Poster session

Wednesday, September 10th, 2014

10:20 – 17:55

Session:		Poster Session		Room: Hall 1
Hours	ID	Presenter	Title	
10:20-17:55	5381	Kobelev, Vladimir V.	PARETO and NASH Fronts as the Limit Case of the Isoperimetric Inequality in Multiobjective Optimization Theory <i>Kobelev, Vladimir V.</i>	
10:20-17:55	5490	Messager, Tanguy	Practical Interest of "Anti-Optimal" Solutions in Optimal Structural Design <i>Messager, Tanguy ; Pyrz, Mariusz</i>	
10:20-17:55	5522	Ruiz-Molina, Juan Carlos	A Widely Linear System for Quaternion Estimation <i>Ruiz-Molina, Juan Carlos; Navarro-Moreno, Jesus ; Fernandez-Alcala, Rosa Maria</i>	
10:20-17:55	5536	Park, Hyo Seon	Performance Based Optimal Seismic Retrofit Technique for pre-Northridge Steel Moment Frames by Using Genetic Algorithm <i>Oh, Byung Kwan ; Choi, Se Woon ; Kim, Yousook ; Park, Hyo Seon</i>	
10:20-17:55	5538	Lin, Shin-Yeu	Heuristic Distributed Algorithm for Optimization of Time Slot Utilization in RFID Reader Network <i>Lin, Shin-Yeu ; Hsieh, Chia-Hsiang</i>	
10:20-17:55	5572	Tabbuso, Pietro	Comparison Between Unrestricted Dynamic Shakedown Design and a New Probabilistic Approach for Structures under Seismic Loadings <i>Palizzolo, Luigi ; Benfratello, Salvatore ; Tabbuso, Pietro</i>	
10:20-17:55	5590	Kobelev, Vladimir	Topological Derivatives for Fundamental Frequencies of Elastic Bodies <i>Kobelev, Vladimir</i>	
10:20-17:55	5621	Oclon, Pawel	The Performance Optimization of the High Temperature Fin And Tube Heat Exchanger Using the Continous Genetic Algorithm. <i>Oclon, Pawel ; Lopata, Stanislaw ; Weglowski, Bohdan ; Pilarczyk, Marcin</i>	
10:20-17:55	5641	Brigadnov, Igor A.	Minimization of Nonsmooth Functions in the Limit Analysis Problem of Electrostatics <i>Brigadnov, Igor A.; Fedotova, Ekaterina M.</i>	
10:20-17:55	5679	Gouveia, Nuno D.	A Minimization Procedure for the Determination of SFRC Tensile Behaviour <i>Gouveia, Nuno D.; Faria, Duarte M. V.; Ramos, António M. P; Custódio, Ana L.</i>	
10:20-17:55	5692	Taler, Jan	Inverse Procedure for Determining Transient Fluid Temperature Based on Temperature Responses of the Thermometer and Pipeline Wall <i>Taler, Jan ; Jaremkiewicz, Magdalena</i>	
10:20-17:55	5699	Carvalheira, Pedro de F. V.	Design Optimization of the Centrifugal Clutch of the M3165 Four-Stroke Internal Combustion Engine <i>Carvalheira, Pedro de F. V.</i>	
10:20-17:55	5701	Karaskova, Adela	Use of Genetic Algorithms for Spare Parts Distribution System <i>Rybickova, Alena ; Karaskova, Adela ; Mockova, Denisa</i>	
10:20-17:55	5720	Dawid, Taler	Determining Heat Transfer Correlations for Transition and Turbulent Flow in Ducts <i>Dawid, Taler</i>	
10:20-17:55	5728	Nakao, Atsuyuki	Development of an Adaptive Experimental Design Method Based on Probabilities to Achieve Requirements and Quantity of Information on Next Experiments <i>Nakao, Atsuyuki ; Kaneko, Hiromasa ; Funatsu, Kimito</i>	
10:20-17:55	5760	Centeno González, Felipe O	Programming the Inverse Thermal Balance for a Bagasse-Fired Boiler, Including the Application of a Optimization Method in MATLAB <i>Centeno González, Felipe O; Martínez Reyes, Arnaldo M; Lesme Jaén, René ; Villa Nova, Helcio F; Silva Lora, Electo E; Gonçalvez, Jose L</i>	
10:20-17:55	5805	Ribeiro Costa, Victor Thauan	Reaeration Coefficient Sensitivity Analysis For Water Quality River Modelling <i>Ribeiro Costa, Victor Thauan; Lugon Junior, Jader; Watts Rodrigues, Pedro Paulo</i>	

Session:		Poster Session		Room: Hall 1
Hours	ID	Presenter	Title	
10:20-17:55	5824	Carmo, Shirlene Kelly Santos	Modeling and Analysis of Control in One Unit Compression Chlorine <i>Carmo, Shirlene Kelly Santos; Vasconcelos, Luis Gonzaga Sales; Emerenciano, Mariângela Da Silva Araújo</i>	
10:20-17:55	5901	Kocsis, Imre	SVM Variants Used in the Investigation of Some Engineering Optimization Problems <i>Kocsis, Imre ; Mankovits, Tamás ; Vámosi, Attila ; Deák, Krisztián</i>	
10:20-17:55	5923	Camponogara, Eduardo	A Mathematical Programming Formulation for Robust Production Optimization of Gas-Lifted Oil Fields <i>Hulse, Eduardo O.; Camponogara, Eduardo</i>	
10:20-17:55	5936	Zambolini-Vicente, Bruno G. G. L.	Optimization of Multimodal Circuits for the Passive Control of Vibrations of Composites Structures <i>Silva, Victor A. C. ; Zambolini-Vicente, Bruno G. G. L.; de Lima, Antônio M. G.</i>	
10:20-17:55	5948	Amado, Franco D. R.	Productivity and Optimization of the Brew Production by Mash Variation <i>Amado, Franco D. R.; Barreto, Vinícius B.; Cruz, Kaiza V.</i>	
10:20-17:55	5968	Anochi, Juliana JAA	Data Assimilation with Artificial Neural Networks Self-Configured by MPCA Meta-Heuristic <i>Anochi, Juliana JAA; Campos Velho, Haroldo HFCV; Shiguemori, Elcio EHS; Luz, Eduardo EFPL</i>	
10:20-17:55	5977	Ahani, Parisa	A Novel Approach for Optimal Integration of Small Electric Vehicles with Diesels Vans in Urban Freight Transport <i>Ahani, Parisa ; Farias, Tiago ; Melo, Sandra</i>	
10:20-17:55	5978	Tovar, Andres	Thin-Walled Component Design Optimization for Crashworthiness using Principles of Compliant Mechanism Synthesis and Kriging Sequential Approximation <i>Liu, Kai ; Tovar, Andres ; Detwiler, Duane</i>	
10:20-17:55	5986	Michal, Cialkowski	Regularization of an Inverse Problem by Imposing the Stiffness on the Graphs of its Solutions <i>Michał, Ciałkowski ; Nikołaj, Botkin ; Jan, Kolodziej ; Andrzej, Frackowiak ; Andrzej, Mackiewicz ; Agnieszka, Wróblewska</i>	
10:20-17:55	5991	Regis, Rommel G	An Adaptive and Locally-Biased Optimization Method Using Kriging Metamodels <i>Regis, Rommel G</i>	
10:20-17:55	5996	Montañez-Barragán, Brenda	Optimization of Extraction of Phenolic Compounds In Cactus Pear (<i>Opuntia Ficus-Indica</i>) Waste Cladodes using Box-Behnken Design of Experiments <i>Mirón-Mérida, Vicente ; Montañez-Barragán, Brenda ; Barragán-Huerta, Blanca E</i>	
10:20-17:55	5997	Sumida, Ivana Yoshie IYS	New Meta-Heuristic for Determining Flight Dynamic Parameters <i>Sumida, Ivana Yoshie IYS; Campos Velho, Haroldo Fraga HFCV; Luz, Eduardo Favero Pacheco EFPL; Cruz, Ronaldo Vieira RVC; Góes, Luiz Carlos Sandoval LCGS</i>	
10:20-17:55	6000	Vasconcelos, Angela Lucínia Urtiga	Study of the Dynamic Behavior and Development of the Optimal Procedure of Startup a Thermally Coupled Distillation Column <i>Vasconcelos, Angela Lucínia Urtiga; Nunes, Ícaro Cazé; Vasconcelos, Luis Gonzaga Sales; Brito; Romildo Pereira</i>	
10:20-17:55	6002	Q., Catharine Q.	Artificial Neural Networks Structure Selection: The benefits of Cross Validation Method <i>N., idelfonso B.; Q., Catharine Q.; P., Karen V.</i>	
10:20-17:55	6028	Albayrak, Ugur	Assessment of Corrosion and Mechanical Properties of Rebar Used in a 50 Years-Old Reinforced Concrete Industrial Building <i>Canbaz, Mehmet ; Albayrak, Ugur</i>	
10:20-17:55	6029	Unluoglu, Esref	Examination of Material Properties and Carbonation of Concrete in a 50-Year-Old Structure <i>Canbaz, Mehmet ; Albayrak, Ugur ; Unluoglu, Esref</i>	
10:20-17:55	6030	Albayrak, Gulcag	Optimization of the Ready-Mixed Concrete Delivery System Using Transportation Algorithm <i>Albayrak, Gulcag; Albayrak, Ugur</i>	
10:20-17:55	6057	Coelho, Helena	FAIPA_MAT and FAIPA_SCI: A Library for Non Linear Constrained Optimization in Matlab and Scilab <i>Coelho, Helena; Herskovits, José</i>	