

EngOpt 2016

5th International Conference on
Engineering Optimization

PROGRAM

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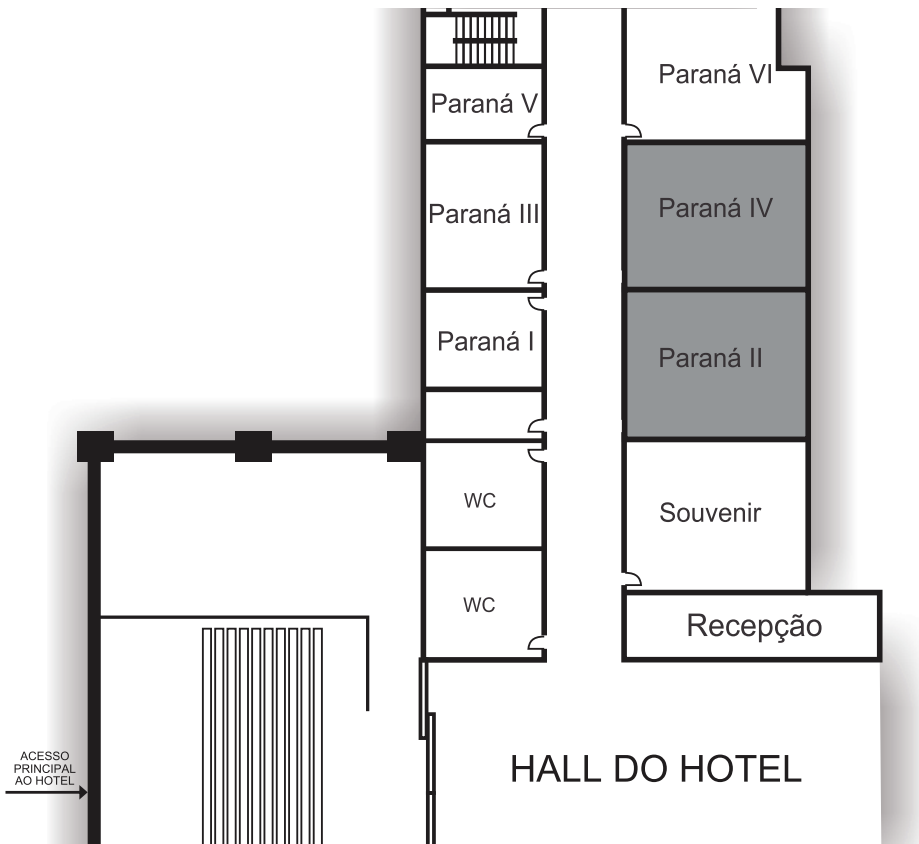
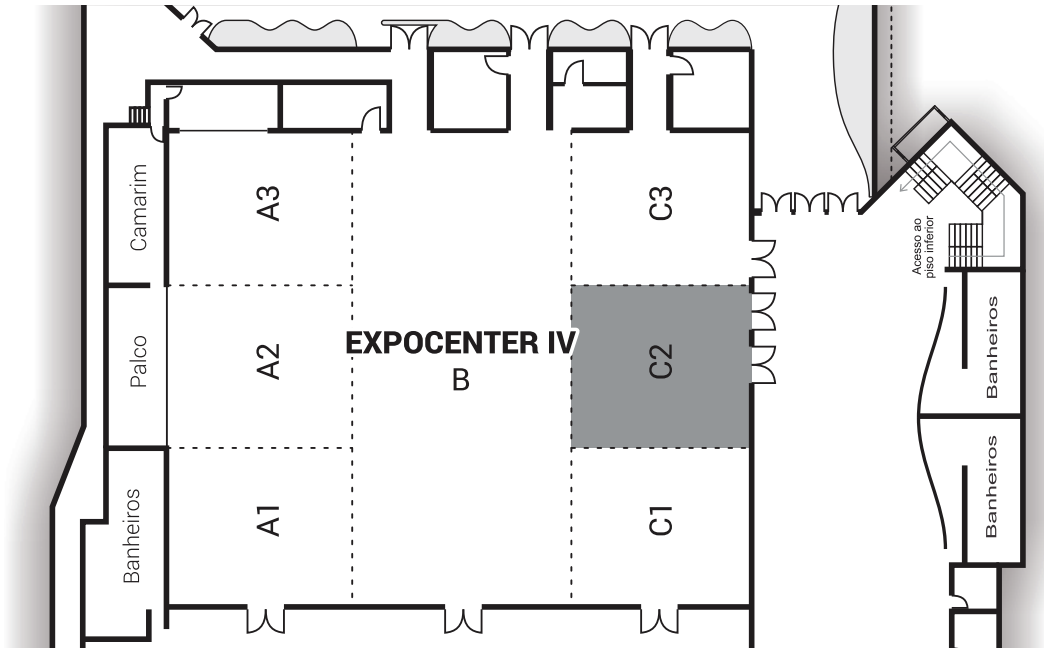
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CONFERENCE FORMAT

	SUN	MON	TUE	WED	THU
08:30 – 10:10		Registration + Opening	Oral Session	Oral Session	Oral Session
10:10 – 10:30		Coffee	Coffee	Coffee	Coffee
10:30 – 12:10		Oral Session	Oral Session	Poster Session	Oral Session
12:10 – 15:00		Lunch	Lunch	Lunch	Conference Closure/Lunch
15:00 – 16:40	Registration	Oral Session	Oral Session	Oral Session	
16:40 – 17:00	Registration	Coffee	Coffee	Coffee	
17:00 – 18:40	Registration	Oral Session	Oral Session	Oral Session	
		Welcome Reception 20:00-21:30		Conference Banquet 20:00 – 23:00	

CONFERENCE CENTER FLOOR PLAN



9:30-10:10	OPENING SESSION Room: Expocenter IV-C2
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ENGOPT 2016 Oral Sessions Monday / Morning 02				
Schedule	TOPOLOGY OPTIMIZATION I		PLANNING AND SCHEDULING I	
	Room	Expocenter IV-C2	Room	Parana IV
	Chaired by	Herskovits, José	Chaired by	Castello, Daniel
10:30-10:50	Stress constraint topology optimization for compliant mechanisms design under large displacements <i>de Souza, Carlos Eduardo; De Leon, Daniel; Gonçalves, Juliano</i>		Multiobjective Dijkstra Algorithm applied to path planning <i>Ekel, Petr; Vieira, Douglas; Pereira Jr., Joel; Castro, Roberto; Chiari, Guilherme; Lisboa, Adriano</i>	
10:50-11:10	Solving large-scale structural topology optimization problems using second-order methods <i>Rojas Labanda, Susana; Stolpe, Mathias</i>		Design of a linear-goal programming model for the dairy production planning of medium-sized farmer <i>Arzamendia, Sofia; López, María M.; Moreno, Ana; Recalde-Ramírez, Jorge L.; Pinto-Roa, Diego P.</i>	
11:10-11:30	Unstructured Cellular Automata for topology optimization in engineering applications <i>Tajs-Zielinska, Katarzyna; Bochenek, Bogdan</i>		Design of an annual plan of harvest and storage of fruit and vegetable through an optimization model <i>Ruiz, Alexis M.; García, Dolores L.; Recalde Ramírez, Jorge L.; López, María M.; Pinto-Roa, Diego P.</i>	
11:30-11:50	Using topology optimization technique to determine the optimized layout of steel reinforcing bars in concrete structures <i>Li, Mengxiao; Zhang, Hexin; Wong, Simon Ho Fai</i>		How to get rid of the discontinuities when constructing surrogates from discontinuous functions <i>Wilke, Daniel</i>	
11:50-12:10	Topology Optimization Method Applied to Gas Adsorption Systems with Phase Change Materials <i>Silva Prado, Diego; Carlos Nelli Silva, Emílio</i>		A Practical Methodology for Path Planning from CAD and CAE Data <i>Peña, Cristhian; Guzmán, María Alejandra; Cárdenas, Pedro</i>	

ENGOPT 2016 Oral Sessions
Monday / Afternoon 01

Schedule	STRUCTURAL OPTIMIZATION I		PLANNING AND SCHEDULING II	
	Room	Expocenter IV- C2	Room	Paraná IV
	Chaired by	Afonso, Silvana	Chaired by	Freire, Wilhelm
15:00-15:20	Differential Evolution with the Adaptive Penalty Method for Structural Multi-Objective Optimization <i>Vargas, Denis; Lemonge, Afonso; Barbosa, Helio; Bernardino, Heder</i>		Optimal lot-sizing and scheduling of multistage batch plants considering multiple orders per product <i>Montagna, Jorge Marcelo; Corsano, Gabriela; Fumero, Yanina</i>	
15:20-15:40	Structural optimization and material fitting of a material with inherent bistable elements <i>Dimitrovová, Zuzana; Heczko, Jan; Lobošský, Libor; Rodrigues, Helder</i>		Multicriteria allocation of resources under conditions of uncertainty <i>Ekel, Petr; Lisboa, Adriano; Penaforte, Douglas; Pereira Jr. , Joel; Ramalho, Felipe; Vieira, Douglas</i>	
15:40-16:00	Optimal placement and distribution of hysteretic damper based on the incremental inverse problem <i>David Sánchez, Wilson Emilio; Moreira Avila, Suzana; Vital de Brito, Jose Luis</i>		Supply chain inventory control policy with stochastic demand events <i>Pacheco, Eduardo; Lüders, Ricardo; Póvoa, Ana; Cannella, Savatore</i>	
16:00-16:20	A Femu methodology to obtain material parameters for thermoplastic materials <i>Bresolin, Francisco Luiz; Castoldi, Natalia; Klahr, Bruno; Vassoler, Jakson Manfredini</i>		Optimization Strategy of Supply Chain Design Using Hybrid Meta-Heuristics Approach in Context of Multi-suppliers <i>Nguyen, Thi Hong Dang; Dao, Thien</i>	
16:20-16:40	Optimization under Uncertainties of Friction Dampers in Civil Structures for the Passive Control of Vibrations <i>Ontiveros-Perez, Sergio Pastor; Fadel Miguel, Leticia Fleck; Fadel Miguel, Leandro Fleck</i>		Optimal Allocation of Gathering Centers for Glass Containers <i>Zayas, Alberto L.; Román, Dahiana A.; Arce, Héctor V.; Recalde-Ramírez, Jorge L.; López, María M.; Pinto-Roa, Diego P.</i>	

ENGOPT 2016 Oral Sessions
Monday / Afternoon 02

Schedule	TOPOLOGY OPTIMIZATION II		OPTIMIZATION WITH APPROXIMATE MODELS I	
	Room	Expocenter IV- C2	Room	Paraná IV
	Chaired by	Fachinotti, Victor	Chaired by	Chapiro, Grigori
17:00-17:20	Reliability based structural topology optimization subject to stress constraints <i>dos Santos, Renatha Batista; Novotny, Antonio André; Torii, André Jacomel</i>		Modeling, simulation and optimization of ethanol extractive distillation using glycerol <i>Rodríguez Carpio, Roymel; Resende Secchi, Argimiro; de Campos Giordano, Roberto</i>	
17:20-17:40	Topology optimization of 2D and 3D heat conduction structures <i>Dbouk, Talib; Dirker, Jaco; harion, jean-luc; Page, Logan Garrick</i>		Integrated system to perform surrogate based aerodynamic optimisation for high-lift airfoil <i>Di Pasquale, Davide</i>	
17:40-18:00	Topology Optimization of I-Section Beams with Web Openings using ESO and BESO Methods <i>Rocha, Karina; Pereira, Anderson; Burgos, Rodrigo</i>		Two-dimensional Knapsack Problem using industrial robots <i>Camacho, Guillermo; Alvarez Martinez, David</i>	
18:00-18:20	An improved ground structure method for large-scale truss topology optimization problems <i>Sokol, Tomasz</i>		Cost Reduction for Nonlinear Systems Under Restrictions on the Manipulated Variables <i>Gómez Múnera, John Anderson; Costanza, Vicente</i>	
18:20-18:40	Topology Optimization of Structures Subject to Pressure Loading <i>Xavier, Marcel; Novotny, Antonio André</i>		Fuzzy Logic Modeling and Optimization of Enzymatic Hydrolysis of Lignocellulosic Materials <i>Flores, Julio Rolando; Vargas, Rafael; Vecchiatti, Aldo</i>	

ENGOPT 2016 Oral Sessions
Tuesday / Morning 01

Schedule	STRUCTURAL OPTIMIZATION II		OPTIMIZATION WITH APPROXIMATE MODELS II	
	Room	Paraná II	Room	Paraná IV
	Chaired by	Habbal, A.	Chaired by	Mazorche, Sandro
08:30-08:50	Adhesion: Model Calibration and Validation <i>Castello, Daniel; Borges, Lavinia; Albuquerque, Emerson; Guzman, Cynthia</i>		Surrogate-based optimization of model parameters for the improved modelling of industrial-scale gas explosions <i>Braatz, Anna-Lena; Hisken, Helene; Rückmann, Jan-Joachim</i>	
08:50-09:10	Sizing optimization of frame structures subjected to dynamic stress constraints <i>Verbart, Alexander; Sandal, Kasper; Stolpe, Mathias</i>		A self-regulated fretwidth harmony search algorithm for predicting fugacity and activity coefficients in binary mixtures <i>Correa, Rodrigo; Jimenez, Cristian; Amaya, Iván</i>	
09:10-09:30	Is it possible to tune a drum? <i>Antunes, Pedro</i>		Improving the optimisation performance of an ensemble of radial basis functions <i>Stramacchia, Michele; Toal, David; Keane, Andy</i>	
09:30-09:50	Free material optimization using FDIPA-GSDP, a feasible directions method for general SDP <i>Zuniga, Andres; Bazan, Elmer; Herskovits, Jose</i>		Mapping the cash problem for data clustering algorithms <i>Boscarioli, Clodis; Knob, André; Villwock, Rosangela</i>	
09:50-10:10	Material distribution and sizing optimization of functionally graded plate-shell structures <i>Moita, Jose; Araujo, Aurelio; Mota Soares, Cristovão; Herskovits, J.</i>		Vibration Reduction of Wind Turbines Using Tuned Liquid Column Damper Using Stochastic Analysis <i>Alkmin, Mansour</i>	

ENGOPT 2016 Oral Sessions
Tuesday / Morning 02

Schedule	TOPOLOGY OPTIMIZATION III		OIL & GAS	
	Room	Parana II	Room	Parana IV
	Chaired by	Sokol, Tomasz	Chaired by	Lyra, Paulo
10:30-10:50	Solving Low Volume Fraction Problems of Topology Optimization Based on Bacterial Chemotaxis <i>Leon Medina, Jersson Xavier; Giraldo Avila, Juan Felipe; Guzmán, María Alejandra</i>		A Quantum Adiabatic Algorithm for Multiobjective Combinatorial Optimization <i>Villagra, Marcos; Baran, Benjamin</i>	
10:50-11:10	A Topology Optimization Method for the Design of Plate Structures <i>Norato, Julian; Zhang, Shanglong; Gain, Arun</i>		Optimal design of a hydrocyclone using a phenomenological-based semiphysical model <i>Henaó Suarez, Juan Carlos; Gonzalez Arango, Camila; Muñoz, Diego A.</i>	
11:10-11:30	Stress Constraint Aggregation without Constraint Relaxation in Topology Optimization <i>Verbart, Alexander; Langelaar, Matthijs; van Keulen, Fred</i>		Constrained waterflooding optimization using an ensemble-based method with sensitivity refinement <i>Horowitz, Bernardo; Willmersdorf, Ramiro Brito; Rojas Tueros, Juan Alberto</i>	
11:30-11:50	Multiscale thermomechanical topology optimization and additive manufacturing of porous injection mold <i>Wu, Tong; Tovar, Andres</i>		Numerical simulation of <i>in-situ</i> combustion model using a mixed complementarity algorithm with the finite element method <i>Chapiro, Grigori; Mazorche, Sandro; Ramirez Gutierrez, Angel</i>	
11:50-12:10	Topological sensitivity analysis for contact problems in elasticity with given friction <i>Lopes, Cinthia Gomes; dos Santos, Renatha Batista; Novotny, Antonio André; Sokolowski, Jan</i>			

ENGOPT 2016 Oral Sessions
Tuesday / Afternoon 01

Schedule	TOPOLOGY OPTIMIZATION IV		- MINISYMPOSIUM - INVERSE PROBLEMS, DESIGN AND OPTIMIZATION	
	Room	Parana II	Room	Parana IV
	Chaired by	Kripka, Moacir	Chaired by	Ritto, Thiago
15:00-15:20	Stress Constrained Topology Optimization of Structures with Ductile Materials under Thermal Stresses <i>Takalloozadeh, Meisam; Yoon, Gil Ho</i>		Optimal seal parameter values for rotating machines considering uncertainties <i>Ritto, Thiago</i>	
15:20-15:40	Various failure constraints of stress-based topology optimization for fluid-structure interaction <i>Yoon, Gil Ho</i>		An approach for the robust design of friction damper passive control systems <i>Torii, André Jacomel; Fadel Miguel, Leticia Fleck; Fadel Miguel, Leandro Fleck; Holdorf Lopez, Rafael</i>	
15:40-16:00	Development of an overhang constraint for topology optimization and additive manufacturing <i>Garaigordobil, Alain; Vegueria, Estrella; Ansola, Ruben</i>		Adjoint based multi-objective shape optimization of a transonic airfoil under uncertainties <i>Kumar, Dinesh; Miranda, João; Raisee, Mehrdad; Lacor, Chris</i>	
16:00-16:20	Structural optimization considering smallest magnitude eigenvalues: a smooth approximation <i>Torii, André Jacomel; Faria, Jairo</i>		Rotation-based sampling MPCA-HJ for Vibration-based Damage Identification <i>Hernández Torres, Reynier; Fraga de Campos Velho, Haroldo; Dagnino Chiviacowsky, Leonardo</i>	
16:20-16:40			Decentralized strategies for ill posed inverse problems <i>Habbal, Abderrahmane</i>	

ENGOPT 2016 Oral Sessions
Tuesday / Afternoon 02

Schedule	NONLINEAR OPTIMIZATION		EVOLUTIONARY TECHNIQUES	
	Room	Paraná II	Room	Paraná IV
	Chaired by	Antunes, Pedro	Chaired by	Castello, Daniel
17:00-17:20	A Feasible Directons Algorithm for General Semidefinite Programming <i>Herskovits, Jose; Roche, Jean-Rodolphe; Bazan Cordova, Elmer</i>		Routing and Spectrum Allocation in EON. An approach based on Multi-objective Genetic Algorithms <i>Fretes, Carmelo; Ortiz, Ysapy; Pinto Roa, Diego Pedro</i>	
17:20-17:40	An improvement on the IED method for solving constrained nonsmooth and nonconvex optimization problems <i>José Rocha Franco, Hernando; Passarella Freire, Wilhelm; de Freitas Fernandes, Camila</i>		Search for the Optimal Structuring Element for Contrast Enhancement Morphological Algorithms using Genetic Algorithms <i>Reyes, Rainer; Vázquez Noguera, José Luis; Legal Ayala, Horacio; Pinto Roa, Diego Pedro</i>	
17:40-18:00	Numerical analysis on the vapor-liquid critical point of binary mixtures: a study about the critical curve of the nonlinear system <i>Parajara, Caroline; Platt, Gustavo; Libotte, Gustavo</i>		A Multiobjective Evolutionary Algorithm for Heat Exchanger Optimization <i>Fonseca, Tales; Lemonge, Afonso; Hallak, Patricia; Bernardino, Heder</i>	
18:00-18:20	An scaled SQP algorithm for solving the minimum distance problem in mechanisms <i>Fernández de Bustos, Igor; García Marina, Vanessa; Urkullu, Gorka</i>		Evolutionary and local search based hybrid optimization model to solve facility layout problem of unequal compartments. <i>Hasda, Ranjan Kumar; Bhattacharjya, Rajib Kumar; Bennis, Fouad</i>	
18:20-18:40	Analysis on the parallel computing applied to a nonlinear problem using the deflation technique <i>Libotte, Gustavo; Platt, Gustavo; Parajara, Caroline</i>		1- Evolutionary algorithm and sensitivity analysis comparison applied to axial flow turbine <i>Silva, Osmar</i>	

ENGOPT 2016 Oral Sessions
Wednesday / Morning 01

Schedule	AERONAUTICAL AND AUTOMOTIVE INDUSTRY I		STOCHASTIC AND ROBUST OPTIMIZATION	
	Room	Paraná II	Room	Paraná IV
	Chaired by	Feliot, Paul	Chaired by	Palizzolo, Luigi
08:30-08:50	Optimization Design Of Keel Beam For CJ828 Structure <i>Xiong, Yuexi; Pan, Yang; Hu, Zhe; He, Jingwu</i>		A Probabilistic Approach to Inverse Problems <i>Zorgati, Riadh; Minoux, Michel</i>	
08:50-09:10	Optimized representation of overlapped welded joints using shell FE and the structural stress method <i>Echer, Leonel; José Marczak, Rogério</i>		A probabilistic approach for optimal design of structures under seismic loads <i>Palizzolo, Luigi; Muscolino, Giuseppe; Benfratello, Salvatore; Tabbuso, Pietro</i>	
09:10-09:30	Multidisciplinary Aspects Of Structural Optimization In Aircraft Design <i>Balunov, Kirill; Uskov, Vladimir; Chedrik, Vasily; Tuktarov, Sergey</i>		Robust Network Routing and p-Cycle Protection under Hose Traffic. An Optimization based on Genetic Algorithm <i>Quiroga V., Gustavo A.; Pinto Roa, Diego Pedro</i>	
09:30-09:50	Design of a commercial aircraft environment control system using Bayesian optimization techniques <i>Feliot, Paul</i>		A Comparison Between Scilab Versions in a Thermodynamic Problem <i>Platt, Gustavo</i>	

ENGOPT 2016 Poster Sessions
Wednesday / Morning 02

10:30-12:10	<p>AERONAUTICAL INDUSTRY Damage detection algorithm optimization based on selection signal parameters for the smart composite <i>Dragan, Krzysztof; Leski, Andrzej; Dziendzikowski, Michal</i></p> <p>ARTIFICIAL INTELLIGENCE AND NEURAL NETWORKS Portable electronic nose applied to determination of contaminants in milk <i>Silva, Franciele; Vasconcelos, Antônio; Vasconcelos, Jomar</i></p> <p>AUTOMOTIVE INDUSTRY Metamodeling-based optimization of driver restraint systems <i>Lima, Anderson; Alves, Marcilio</i> Parametric Optimization of a Ladder Vehicle Chassis <i>Alba, Michel; Avila, Suzana; Shzu, Maura</i></p> <p>BIOMECHANICS Application of ABC Particle Filter in the Calcium Oscillation Dynamics of Neurons" <i>Estumano, Diego; Colaço, Marcelo; Orlande, Helcio</i></p> <p>CHEMICAL PROCESSING EQUIPMENTS MINLP superstructure optimization for protein extraction in the surimi manufacturing process <i>Reinheimer, Maria Agustina; Scenna, Nicolás</i> Thermodynamic Approach: A Review With Regard to Optimization <i>Manzi, João; Góes, Paulo</i></p> <p>ELECTRICAL SYSTEMS Applying Robust Optimization to Unit Commitment <i>Bombacini, Marcos</i> Battery Test System with Regenerating Capability <i>Ketzer, Marcos; Freitas, David; Lima, Antonio; Oliveira, Alexandre</i> Parameter Optimization of a Lead-Acid Battery Model <i>Freitas, David; Ketzer, Marcos; Lima, Antonio</i></p> <p>ENERGY GENERATION AND TRANSMISSION Optimal management policies for the economic optimal dispatch of a hydrothermal power grid <i>Godoy, Ezequiel; Scenna, Nicolás; D'Emanuele Ares, Carolina</i></p> <p>EVOLUTIONARY TECHNIQUES Computer vision and feature selection with BBIL for recognition of agricultural management zones <i>Macedo, Camila; Thom de Souza, Rodrigo Clemente; Guedes Filho, Osvaldo</i></p>	<p>FUZZY OPTIMIZATION Cluster validity analysis in evolving fuzzy clustering algorithms <i>Carvalho Vieira, Libanio; Donato Rocha Filho, Orlando; Scenna, Nicolás</i></p> <p>HEAT AND MASS TRANSFER Effects of temperature during ultrasound-assisted extraction of anthocyanins from grape pomace: mathematical modeling <i>Bonfigli, Mónica; Chiandoni, Florencia; Kraft, Romina; Reinheimer, Maria Agustina; Masciarelli, Roque</i></p> <p>IMAGING Monitoring Methods in Electrical Impedance Tomography <i>Queiroz, Jorge</i></p> <p>INTEGER PROGRAMMING Second Proof That P=NP <i>Munapo, Elias</i></p> <p>MATHEMATICAL PROGRAMMING ALGORITHMS Application of Conjugate Gradients Method in Linear Systems <i>Donato Rocha Filho, Orlando; Cantanhêde, Saulo</i></p> <p>MECHANICAL ENGINEERING Selecting optimal flight parameter for prediction of loads of vertical stabilizer of an aircraft <i>Dragan, Krzysztof; Leski, Andrzej; Dziendzikowski, Michal</i></p> <p>METAMODELS AND SURROGATES IN OPTIMIZATION Kriging-based Multiobjective Optimization of a Fuselage-Like Composite Section with Curvilinear Fibers <i>Passos, Adriano; Luersen, Marco</i></p> <p>METEOROLOGY Climate Prediction based on Mamdani Fuzzy Model <i>Donato Rocha Filho, Orlando; Gomes, Daiana; Pires, Danúbia</i></p> <p>MULTI-OBJECTIVE OPTIMIZATION Multi-Objective Optimization of monitoring well location for CO2 leakage detection in GCS <i>Nogues, Juan; Baran, Benjamin; Royg, Gisell</i></p>
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ENGOPT 2016 Poster Sessions
Wednesday / Morning 02

10:30-12:10	<p>NONLINEAR PROGRAMMING</p> <p>Optimal Speed of Multiple UAVs based on Nonlinear Programming to Avoid Collision in Periodic Paths <i>Oliveira, Luana; Oliveira, Edimar; Willer de Oliveira, Leonardo; Souza, Marina</i></p> <p>Optimization Methods for Commodity Model Calibration <i>Effio, Carolina; Herskovits, Jose; Sagatizabal, Claudia; Luna, Juan Pablo</i></p> <p>Optimization of recombinante l-asparaginase production using metabolic fluxes dynamic model <i>Santos, Lizandro; Washington, Mayara; Alves, Tito Livio; Resende Secchi, Argimiro</i></p> <p>OIL AND GAS INDUSTRIES</p> <p>Crude oil scheduling optimization including specific operational aspects of a Brazilian refinery <i>Mauro da Silva Neiro, Sérgio; Seixas, Raiana; Viana Murata, Valéria</i></p> <p>Optimization of energy supply projects of industrial plants <i>Schiochet, André Fernando; Borges, Thiago Trezza; Maia, Maria de Lourdes Oliveira; Costa, Alessandro Nogueira da</i></p> <p>Optimizing vessel fleet logistics for oil transport from off-shore platforms to the refineries <i>Carvalho, Sandra Helena Vieira de; da Silva Barbosa, Luan; Soletti, Joao Inacio; Barros, João</i></p> <p>Simultaneous Optimization of Rock Facies and Porosities leveraging Spatial Dependencies <i>Lima, Luiz Alberto; Goernitz, Nico; Varella, Luiz Eduardo; Nakajima, Shinichi;; Roux, Tiago; Queiroz, Luciano</i></p> <p>OPTIMIZATION WITH APPROXIMATE MODELS</p> <p>Extremum Seeking Optimization for Wastewater Quality Parameters <i>Martins, Felipe; Pessoa, Robson; Mendes, Carlos; Esquerre, Karla; Krstic, Miroslav</i></p> <p>Minimum Energy Control for Fractional Discrete-Time Systems <i>Klamka, Jerzy;</i></p> <p>Optimal design of functionally graded material plate structures <i>Madeira, Jose; Franco Correia, Victor; Araujo, Aurelio; Mota Soares, Cristóvão Manuel; Herskovits, Jose</i></p> <p>Walsh single shooting and multiple shooting to solve dynamic optimization problems <i>Santos, Lizandro; Prata, Diego</i></p>	<p>PLANNING</p> <p>A multi-period programming model for the production optimization of a polyurethane foaming plant <i>Montagna, Jorge Marcelo; Vecchietti, Aldo; Rodriguez, Maria Analia; Corsano, Gabriela</i></p> <p>SCHEDULING</p> <p>Optimization Of Air Transport System In Offshore Platforms <i>Soletti, Joao Inacio; Carvalho, Sandra Helena Vieira; Barros, João; da Silva Barbosa, Luan</i></p> <p>SENSITIVITY ANALYSIS</p> <p>Sensitivity analysis of water stage and pollutant concentration profiles for an open-channel course <i>Delfratte, Evangelina; Scenna, Nicolás; Santa Cruz, Alejandro</i></p> <p>SPACE INDUSTRY AND OTHER INDUSTRIAL APPLICATIONS</p> <p>Multi-objective optimization of intensified separation sequences using a hybrid DE method <i>Salas Aguilar, Claudia; Bonilla-Petriciolet, Adrián</i></p> <p>STOCHASTIC OPTIMIZATION</p> <p>Stochastic optimization for optimal control of a fermentation process for xylitol production <i>Koop, Laís; Corazza, Marcos; Voll, Fernando; Bonilla-Petriciolet, Adrián</i></p> <p>TOPOLOGY OPTIMIZATION</p> <p>Topology optimization vehicle chassis: software applied to optimization trucks and buses chassis <i>Lixandrão Fernando, Paulo Henrique; Yastami Nakamoto, Francisco; A. Santos, Givanildo</i></p>
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ENGOPT 2016 Oral Sessions
Wednesday / Afternoon 01

Schedule	MINISYMPOSIUM OPTIMIZATION OF COMPOSITE STRUCTURES I		AERONAUTICAL AND AUTOMOTIVE INDUSTRY II	
	Room	Paraná II	Room	Paraná IV
	Chaired by	Araujo, Aurelio	Chaired by	Caldeira, Aldélio
15:00-15:20	MULTIGLODS - global and local multiobjective optimization using direct search <i>Madeira, Jose; Custodio, Ana</i>		Domain reduction strategy for stability analysis on NACA0012 airfoil <i>Sanvido, Silvia; Abbruzzese, Gennaro; de Vicente Buendia, Javier; Valero Sanchez, Eusebio</i>	
15:20-15:40	An efficient design optimization of anisotropic cylinders using evolutionary algorithms <i>Tabakov, Pavel; Moyo, Sibusiso</i>		Assessment of Energy Management Strategies for a Hybrid Electric Bus <i>Orbaiz, Pedro; Nieberding, Nicolas; Adorno, Ramiro; Nigro, Norberto Marcelo; Carignano, Mauro Guido</i>	
15:40-16:00	MultiObjective Optimization of Piezoelectric Patch Distribution for Vibration Attenuation in Sandwich Plates <i>Araujo, Aurelio; Luis, Ndilokelwa; Madeira, Jose</i>		Production optimization of mixed model assembly lines in automotive industry using mathematical programming <i>A. Rodrigues, Luiz Carlos; Meira, Marcelo; Magatão, Leandro; Drevek, Paulo Roberto</i>	
16:00-16:20	On Probabilistic Optimization of Aircraft Composite Structures in Uncertain Conditions <i>Gurvich, Mark</i>		Tackling sequencing uncertainties at a vehicle painting line through simulation and mathematical modeling <i>Drevek, Paulo Roberto; A. Rodrigues, Luiz Carlos; Magatão, Leandro; Meira, Marcelo; Neut, João</i>	
16:20-16:40	Topology Optimization of Plane Frames <i>Kripka, Moacir; Triches Boscardin, Juliana</i>		Inverse stochastic identification of vehicle suspension damping coefficients <i>Caldeira, Aldélio; Neto, Ricardo Teixeira da Costa; de Carvalho, Michelle Soraia</i>	

ENGOPT 2016 Oral Sessions
Wednesday / Afternoon 02

Schedule	MINISYMPOSIUM OPTIMIZATION OF COMPOSITE STRUCTURES II		MINISYMPOSIUM OPTIMIZATION IN OIL AND GAS INDUSTRIES	
	Room	Paraná II	Room	Paraná IV
	Chaired by	Madeira, Jose	Chaired by	Horowitz, Bernardo
17:00-17:20	Multi-Objective Control Optimization for Curing the Shell-like Composite Structures <i>Shevtsov, Sergey; Flek, Michail; Tarasov, Ilya; Zhaivoronskaia, Kseniia</i>		Using design optimization for a dynamically equivalent truncated mooring system <i>Lyra, Paulo; Ferreira, Fábio; Nobre, Eduardo; Afonso, Silvana</i>	
17:20-17:40	Multi-material topology optimization of truss structures <i>Weldeyesus, Alemseged Gebrehiwot; Stolpe, Mathias</i>		Designing hybrid energy systems for buildings <i>Maaß, Volker</i>	
17:40-18:00	Practical Aspects to Simultaneous Structural and Material Optimization <i>Lang, Margit Christa</i>		Crude oil scheduling including the pipeline schedule connecting terminals and in-land refineries <i>Mauro da Silva Neiro, Sérgio; Silva de Paula, Frederico; Viana Murata, Valéria</i>	
18:00-18:20	Synthesis and design optimization of structural layouts for aircraft components <i>Chedrik, Vasily; Tuktarov, Sergey</i>		Robust management in reservoir engineering problems <i>Afonso, Silvana; Wellano, Jefferson; Willmersdorf, Ramiro Brito</i>	
18:20-18:40	A domain Decomposition Method applied with Newton's Method for fiber orientation optimization in thin plates submitted to linear bending <i>de Vargas Lisboa, Tales; José Marczak, Rogério; Gieger, Filipe Paixão</i>			

ENGOPT 2016 Oral Sessions
Thursday / Morning 01

Schedule	ENERGY I		APPLICATIONS OF OPTIMIZATION I	
	Room	Paraná II	Room	Paraná IV
	Chaired by	Dotti, Franco	Chaired by	Vucinic, Dean
08:30-08:50	A suitable programming paradigm for optimizing short-term hydrothermal generation scheduling <i>Gil, Esteban; Soto-Ruiz, Christian</i>		Variable volume heart blood flow simulations made easy with automatic grid generation <i>Vucinic, Dean; Aksenov, Andrey; Luniewski, Tomasz; Zietak, Wojtek</i>	
08:50-09:10	Optimization of horizontal generator components by numerical and immuno-inspired methods. <i>Giesbrecht, Mateus</i>		A possibilistic model for tactical planning of a manufacturing company with demand uncertainty <i>Vecchiotti, Aldo; Cunico, Maria Laura</i>	
09:10-09:30	2- Axial turbine preliminary design optimization <i>Silva, Osmar</i>		Heuristics to solve the based fruit beverage lot-sizing problem <i>Ferreira, Deisemara; Toscano, Alyne; Morabito, Reinaldo</i>	
09:30-09:50	Energy consumption optimization for rotation control of a parametric pendulum with variable length <i>Dotti, Franco; Reguera, Florencia</i>		Parameter Estimation in a Thermodynamic Model Using Differential Evolution in Parallel Python <i>Vasconcelos, Lucas; Luz, Jorge; Platt, Gustavo</i>	
09:50-10:10	Bioremediation of oil-polluted marine zones: Weak and strong control of the discharge of substances <i>Parra-Guevara, David; Skiba, Yuri</i>		Study of an anisotropic variational model for soft biological tissues <i>Formenton, Ana Barbara; Vassoler, Jakson Manfredini; Fancello, Eduardo</i>	

ENGOPT 2016 Oral Sessions
Thursday / Morning 02

Schedule	ENERGY II		APPLICATIONS OF OPTIMIZATION II	
	Room	Paraná II	Room	Paraná IV
	Chaired by	Zorgati, Riadh	Chaired by	Mohseni, Kamran
10:30-10:50	Alternatives of Linear Search in the context of Interior Points applied to Power Flow Problem on Large Electrical Systems <u>Alves De Oliveira, Luiz Antonio; Ojeda Soto, Javier Ruben</u>		Vapor-Liquid Equilibrium of a Binary System Composed by Heptane + Dodecane: Experimental Procedures and Parameters Estimation <u>Luz, Jorge; Platt, Gustavo; Lacerda Custódio, Dayana; Vasconcelos, Lucas</u>	
10:50-11:10	Lagrangian Relaxation in Optimal Power Flow Problem applied to Large Electrical Systems <u>Alves De Oliveira, Luiz Antonio; Ojeda Soto, Javier Ruben</u>		An efficient approach for optimization of physical modeling of wave-induced phenomena <u>Sulisz, Wojciech</u>	
11:10-11:30	A multi-objective immune algorithm for placement of capacitors in a system with nonlinear loads <u>Alves, Helton</u>		Optimizing Universities Allocation with Integer Programming Using a New Distance Measure <u>Costa Filho, Cicero</u>	
11:30-11:50	Remote Switches Placement in Electrical Power Systems using SPEA-2 <u>Alves, Helton; Sousa, Railson</u>		Control of heat flux using computationally designed metamaterials <u>Fachinotti, Victor; Peralta, Ignacio; Huespe, Alfredo; Ciaronetti, Angel</u>	
11:50-12:10			Thrust Optimization in Cephalopod Locomotion <u>Mohseni, Kamran</u>	

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