

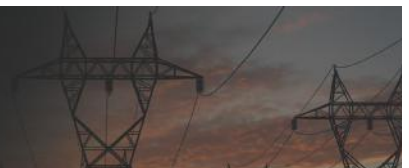


# GENERAL SCHEDULE

## TUTORIAL COURSES

Time		TUESDAY September 20, 2016	
09:00-10:00		Registration Venue: Room Plus	
10:00-13:00		<b>Tutorial Course 1, part I. Venue: Room A</b>  <b>Surge Protection of Power Systems according to IEEE C62</b>  <b>Presenter: Jonathan Woodworth</b>	<b>Tutorial Course 2, part I. Venue: Room C</b>  <b>Electricity Markets: Basic concepts and International Experiences</b> <b>Presenters: Horacio Tovar, Jaime Cerda and Guillermo Bautista</b>
13:30-15:00		Lunch (Venue: Hotel)	
15:00-17:00		<b>Tutorial Course 1, part I. Venue: Room A</b>  <b>Surge Protection of Power Systems according to IEEE C62</b>  <b>Presenter: Jonathan Woodworth</b>	<b>Tutorial Course 2, part II. Venue: Room C</b>  <b>Mexican Electric Market : Operation Experiences</b> <b>Presenters: Engineers from CENACE-México (Mexican ISO), Marcelino Madrigal and Ricardo Mota</b>

Time		THURSDAY September 22, 2016	
08:00-10:00		Registration	
10:00-11:30		<b>Tutorial Course 3, part I. Venue: Room B</b> <b>Harmonics in Distribution Networks with Integration of Renewable Energy and Modern Electronic Equipment</b>  <b>Presenters: Manuel Madrigal and Jan Meyer</b>	
11:30-11:50		<b>Coffe Break</b> <b>Venue: Gran Salon</b>	
11:50-14:00		<b>Tutorial Course 3, part II. Venue: Room B</b> <b>Harmonics in Distribution Networks with Integration of Renewable Energy and Modern Electronic Equipment</b>  <b>Presenters: Manuel Madrigal and Jan Meyer</b>	





## COCKTAIL RECEPTION, PLENARY TALKS AND PARALLEL SESSIONS

Time		TUESDAY September 20, 2016
15:00-18:00		<b>Registration</b> Venue: Room Plus
19:00-22:00		<b>Cocktail Reception</b> Venue: Room Premier

Time		WEDNESDAY September 21, 2016							
08:00-9:00		<b>Registration</b> Venue: Room Plus							
09:00-9:15		<b>Opening Ceremony</b> Venue: Room Premier							
09:15-10:30		<b>T&amp;D LA 2016 Keynote Speech I: New Paradigms in HVDC Transmission Systems</b> <i>Prof. Enrique Acha Daza, Tampere University of Technology, Finland</i> Venue: Room Premier							
10:30-11:00	<b>Industrial Exhibition</b>  Venue: Gran Salon	<b>Coffe Break / Industrial Exhibition Opening</b> Venue: Gran Salon							
11:00-13:20		FOUR PARALLEL SESSIONS, Venue:							
		<table border="1" style="width: 100%; text-align: center;"> <tr> <td>Room: A</td> <td>Room: C</td> <td>Room: Ocampo</td> <td>Room: Las Rosas</td> </tr> <tr> <td>Power Quality</td> <td>Wind and Ocean Energy</td> <td>Distribution Networks I</td> <td>HVDC and Planning</td> </tr> </table>	Room: A	Room: C	Room: Ocampo	Room: Las Rosas	Power Quality	Wind and Ocean Energy	Distribution Networks I
Room: A		Room: C	Room: Ocampo	Room: Las Rosas					
Power Quality		Wind and Ocean Energy	Distribution Networks I	HVDC and Planning					
13:30-15:00	<b>Lunch (Venue: Hotel)</b>								
15:00 - 17:00	<b>Panel: International Experiences in Electric Energy Markets</b> <b>Venue: Room Premier</b> <b>Moderator: Dr. Damir Novosel, IEEE PES President, Quanta Technology, Inc.</b> <b>Panel Members:</b> <i>Kenan Ogelman, Vice President, Commercial Operations, ERCOT, USA</i> <i>Dr. Juan Carlos Araneda, Director of Planning and Development, CDEC-SING, Chile</i> <i>Ing. Eduardo Meraz, CEO of the National Center for Energy Control, Mexico</i> <i>Ing. César Butrón, CEO of the COES-SINAC, Perú</i> <i>Ing. César Ramírez, Technical Vicepresident of Energy Transport-ISA, Colombia</i>								





Time		THURSDAY September 22, 2016				
08:00-9:00		Registration				
09:00-10:00		<b>T&amp;D LA 2016 Keynote Speech II: Energy Management Systems for Microgrids</b> <i>Prof. Claudio A. Cañizares, University of Waterloo, Canada</i> Venue: Room Premier				
10:00-11:20	<b>Industrial Exhibition</b>  Venue: Gran Salon	FOUR PARALLEL SESSIONS, Venue:				
		Room: A	Room: C	Room: Ocampo	Room: Las Rosas	
Electrical Equipment I		Distribution Networks II	Electrical Equipment II	Power Systems Applications I		
<b>Coffe Break</b> Venue: Gran Salon						
FOUR PARALLEL SESSIONS, Venue:						
Room: A		Room: C	Room: Ocampo	Room: Las Rosas		
Electromagnetic Transients and Equipment		Electricity Markets and Economics	Power Systems Control and Oscillations	Data Management and Applications		
<b>Lunch (Venue: Hotel)</b>						
15:00-17:00			<b>Panel: The Opening of the Mexican Electricity Market</b> Venue: Room Premier Moderator: <i>M.C. Jesús González Flores</i> Panel Members: <i>Dr. Rolando Nieva Gómez, Electrical Systems Director, Electrical Research Institute, Mexico</i> <i>M.C. Marcos Valenzuela, Electricity Market Management Director, Mexico</i> <i>Dr. Marcelino Madrigal, Energy Regulatory Commission, México</i> <i>Dr. Ricardo Mota Palomino, Electricity Market Monitor, México</i> <i>Dr. Guillermo Bautista, CAISO Manager of Market Validation and Quality Analysis, CA, USA</i>			
20:00-23:00			<b>Gala Dinner</b> Venue: Casa de Gobierno del Estado de Michoacán			

Time		FRIDAY September 23, 2016				
08:00-9:00		Registration				
09:00-10:00		<b>T&amp;D LA 2016 Keynote Speech III: Smart Grids: Challenges and Opportunities</b> <i>Ing. Marcelino Torres Vázquez, Comisión Federal de Electricidad, México</i> Venue: Room Premier				
10:00-11:00	<b>Industrial Exhibition</b>  Venue: Gran Salon	FOUR PARALLEL SESSIONS, Venue:				
		Room: A	Room: C	Room: Ocampo	Room: Las Rosas	
Power System Applications II		Identification in Electrical Systems	Power Systems Optimization	Power Systems Applications III		
<b>Coffe Break</b> Venue: Gran Salon						
FOUR PARALLEL SESSIONS, Venue:						
Room: A		Room: C	Room: Ocampo	Room: Las Rosas		
Electric Vehicles		Photovoltaic Systems	Electrical Equipment III	Power Systems Applications IV		
12:30-13:30			<b>T&amp;D LA 2016 Keynote Speech IV: El Impacto de las Energías Renovables en los Sistemas Eléctricos de Potencia</b> <i>Prof. Gilberto Enriquez Harper, Instituto Politécnico Nacional, México</i> Venue: Room Premier			
13:30-14:00			<b>Closing Ceremony</b>			
13:40-15:00			<b>Lunch (Venue: Hotel)</b>			





## SCHEDULE OF SESSIONS AND PAPERS WEDNESDAY SEPTEMBER 21

WEDNESDAY PARALLEL SESSIONS (Time: 11:00 - 13:20)			
Power Quality	Venue: Room A	Chair: Dr. J. Jesus Rico Melgoza	
Time	Paper ID	Title	Author(s)
11:00 - 11:20	116	New Possibilities in Field Testing of Distributed Protection Systems	David Gachuz and Jesus Coronel
11:20 - 11:40	82	Voltage Sag Assessment Considering Time Characteristic of Distance Protection in Meshed Network	Lipin Chen, Quanming Zhang, Haiyan Wang, Ruiguang Ma, Wei Wang and Hao Xu
11:40 - 12:00	142	Control design of an NPC converter based Active Power Filter for the Selective Harmonic Compensation	José Luis Monroy Morales, Máximo Hernández Ángeles, David Campos Gaona and Rafael Peña Alzola
12:00 - 12:20	37	A Phasor Estimation Algorithm Based on Conics Analysis with Vector Analytic Geometry	Moises Martinez and Delia Colome
12:20 - 12:40	144	Application of a photovoltaic generator to mitigate steel mill voltage fluctuation problems	Norberto Garcia-Barriga and Miguel Angel Vargas-Cruz
12:40 - 13:00	109	Analysis of Harmonic and Interharmonic Signals through Generalized-Fourier Series	Victor Nuño, Felipe Uribe, Emilio Barocio and Pavel Zuñiga
13:00 - 13:20	72	Harmonic and Supraharmonic Emission of On-Board Electric Vehicle Chargers	Jan Meyer, Sascha Mueller, Stefan Ungethuen, Xu Xiao, Adam Collin and Sasa Djokic

WEDNESDAY PARALLEL SESSIONS (Time: 11:00 - 13:00)			
Wind and Ocean Energy	Venue: Room C	Chair: Dr. J. Aurelio Medina Ríos	
Time	Paper ID	Title	Author(s)
11:00 - 11:20	139	Dynamic Harmonic Regression Approach to Wind Power Generation Forecasting	José Armando Jiménez and Arturo Román Messina
11:20 - 11:40	94	Observer Based Control for WECS. Wind Speed Estimation.	Pablo Troncoso, Ricardo Julián Mantz and Pedro Eduardo Battaio
11:40 - 12:00	73	Inertial response of an Offshore Wind Power Plant with HVDC-VSC	Victor Preciado, Manuel Madrigal, Eduard Muljadi and Vahan Gevorgian
12:00 - 12:20	66	Effects of Inertia Emulation on Dynamic Behavior of Bus Voltages in Power Systems	Jesús Alejandro Sotelo and Claudio R. Fuerte
12:20 - 12:40	80	Damping Control Loops for Mitigating Power System Oscillation with Wind Parks Support	Abdulla Alshimmari
12:40 - 13:00	46	Wave Energy Conversion Assessment in Mexican Seaside Points	Xiomara González-Ramírez, Ivan A. Hernandez-Robles and Héctor Barrios-Piña
13:00 - 13:20	93	Localized Power as unconventional solution to integrated Generation and Transmission Planning in Colombia	Marco Antonio Caro Camargo, Juan Carlos De La Torre Florian, Raul Rodríguez Peña, Baisser Antonio Jiménez Rivera, Nicolas Achury and Jhon Sebastian Zarate

WEDNESDAY PARALLEL SESSIONS (Time: 11:00 - 13:20)			
Distribution Networks I	Venue: Room Ocampo	Chair: Dr. Hector Francisco Ruiz Paredes	
Time	Paper ID	Title	Author(s)
11:00 - 11:20	69	A Comparative Study Of Multi-Objective Optimization Methods For Power Distribution	Marco Antonio Leon, José Leonardo Guardado, Francisco Rivas and Enrique Melgoza
11:20 - 11:40	15	Distribution Network Capacity Support from Flexible Smart Multi-Energy Districts	Eduardo Alejandro Martínez Ceseña and Pierluigi Mancarella
11:40 - 12:00	88	A multicriteria approach for performance evaluation of distribution system operators	Edison Aranha Neto, Fernando Mussoi, Raimundo Teive, Fabiano Andrade, Jorge Coelho, Fredner Cardoso, João Paulo Parreira and Thiago Guth
12:00 - 12:20	26	An MILP Model for the Analysis of Operation of Energy Storage Devices in Distribution Systems	Leonardo H. Macedo, John F. Franco, Marcos J. Rider and Rubén Romero
12:20 - 12:40	74	OpenDSS-Based Distribution Network Analyzer in Open Source GIS Environment	Roger González, Andrés Arguello, Gustavo Valverde and Jairo Quiros-Tortos
12:40 - 13:00	75	Distribution Network Model Builder for OpenDSS in Open Source GIS Software	Pablo Quesada, Andrés Arguello, Jairo Quirós-Tortós and Gustavo Valverde
13:00 - 13:20	119	Test and Analysis of Protection Behavior on parallel Lines with mutual Coupling	David Gachuz and Jesus Coronel





WEDNESDAY PARALLEL SESSIONS (Time: 11:00 - 13:20)			
HVDC and Planning	Venue: Room Las Rosas	Chair: Dr. Luis Miguel Castro Gonzalez	
Time	Paper ID	Title	Author(s)
11:00 - 11:20	126	Static generation capacity expansion planning using linear transmission distribution factors	Victor Hinojosa
11:20 - 11:40	62	Reduced Scenario Methodology for Treating Uncertainty in Transmission Expansion With Large Wind Power Penetration	Carlos Adrian Correa-Florez, Geovanny Marulanda and Alejandro Sanchez-Salcedo
11:40 - 12:00	135	Multi-objective Transmission Expansion Planning Considering Uncertainty in Wind Power and Demand	Carlos Adrian Correa-Florez, Alejandro Sanchez-Salcedo and Andres Felipe Panesso
12:00 - 12:20	33	Long Term Transmission Expansion Planning considering Generation-Demand Scenarios and HVDC lines	Laura M. Escobar, Ruben Augusto Romero Lázaro, Antonio H. Escobar Zuluaga and Ramon A. Gallego Rendon
12:20 - 12:40	16	Transmission Network Expansion Planning Considering HVAC/HVDC Lines and Technical Losses	Andres H. Dominguez, Leonardo H. Macedo, Antonio H. Escobar Zuluaga and Rubén Romero
12:40 - 13:00	3	Study on Frequency Control Strategy for ORMOC-NAGA HVDC Project in Philippines	Wenqiang Zhao, Yongping Wang, Baoli Chang, Haiying Li and Zhiguo Li
13:00 - 13:20	120	Analysis of Electric Vehicle Charging Impact on the Electric Power Grid	Zeming Jiang, Hao Tian, Mohammed J. Beshir, Surendra Vohra and Ali Mazloomzadeh

## THURSDAY SEPTEMBER 22

THURSDAY PARALLEL SESSIONS (Time: 10:00 - 11:40)			
Electrical Equipment I	Venue: Room A	Chair: Dr. Leonardo Guardado Zavala	
Time	Paper ID	Title	Author(s)
10:00 - 10:20	95	A Comparison of Circuit Breaker Technologies for Medium Voltage Direct Current Distribution Networks	Ala Qawasmi, Nils Soltau, Rik W. De Doncker, Matthias Heidemann, Paul Gregor Nikolic and Armin Schnettler
10:20 - 10:40	115	A comparative study between surge arrester monitoring through capacitive/resistive measurement bridge and digital decomposition	Daiana A. Da Silva, Kari Lahti, José Pissolato Filho, Maurizio Albano and A.Manu Haddad
10:40 - 11:00	27	Circuit-Breakers for Medium-Voltage DC Grids	Matthias Heidemann, Paul Gregor Nikolic, Armin Schnettler, Ala Qawasmi, Nils Soltau and Rik W. De Doncker
11:00 - 11:20	13	The Application of Interval Bayesian Network Method in the Reliability Assessment of Substation Bus Arrangement	Feng Qian, Yang Yi, Yongbin Li and Ran Li
11:20 - 11:40	101	High Stepping DC/DC Topology for Voltage Source Converters in Low Power Renewable Energy Applications	Benjamin Vidales Luna, Manuel Madrigal Martínez and Domingo Torres Lucio

THURSDAY PARALLEL SESSIONS (Time: 10:00 - 11:20)			
Distribution Networks II	Venue: Room C	Chair: Dr. Francisco Rivas	
Time	Paper ID	Title	Author(s)
10:00 - 10:20	54	Impact Assessment of New Services in the Galapagos Low Voltage Network	Diego Morales, Yvon Besanger, Carlos Alvarez and Ricardo Medina
10:20 - 10:40	99	An efficient method for power flow calculation applied to the reconfiguration of radial distribution systems	Abner Suchite Remolino and Hector Francisco Ruiz Paredes
10:40 - 11:00	42	Optimal Volt-VAR Control Operation for Energy Cost Reduction in Distribution Systems Considering a Voltage Dependent Load Model	Ozy Daniel Melgar Dominguez, Carlos Francisco Sabillon Antúnez, John Franco, Marina Lavorato and Marcos Rider
11:00 - 11:20	84	The Impact of Time Series-based Interruption Cost on Online Risk Assessment in Distribution Networks	Jonatas Leite, José Roberto Mantovani, Mladen Kezunovic, Qin Yan, Tatjana Dokic and Po-Chen Chen





THURSDAY PARALLEL SESSIONS (Time: 10:00 - 11:40)			
Electrical Equipment II	Venue: Room Ocampo	Chair: Dr. Vicente Venegas Rebollar	
Time	Paper ID	Title	Author(s)
10:00 - 10:20	12	A Survey on the Reliability of Protective Systems for Power Transformers	Carlos J. Zapata and Jhon F. Valencia
10:20 - 10:40	127	Experimental Procedure to obtain Electromagnetic Properties of A-36 Low Carbon Steel Plates utilized in Transformers	David Antonio Aragon-Verduzco, Juan Carlos Olivares-Galvan, Rodrigo Ocon-Valdez, Salvador Magdaleno-Adame, Rafael Escarela-Perez and Eduardo Campero-Littlewood
10:40 - 11:00	145	Data-driven approach to Observer-based incipient fault detection in transformers	Ivon Elena Leal Leal, Efrain Alcorta García, Carlos Perez Rojas and Sigridt Garcia Martinez
11:00 - 11:20	4	Selection of Polymer Insulators for Harsh Environments	Roberto Gomes
11:20 - 11:40	104	Modeling Capacitive Voltage Transformers for Distorted Waveforms Measurements	Marcelo Brehm, Daniel Slomovitz, Gonzalo Aristoy, Alejandro Santos and Leonardo Trigo

THURSDAY PARALLEL SESSIONS (Time: 10:00 - 11:20)			
Power Systems Applications I	Venue: Room Las Rosas	Chair: Dr. Norberto Garcia Barriga	
Time	Paper ID	Title	Author(s)
10:00 - 10:20	141	Analysis of PMU Algorithm Errors During Fault Transients and Out-of-Step Disturbances	Tamara Becejac, Payman Dehghanian and Mladen Kezunovic
10:20 - 10:40	48	Assessing the Real-Time Performance of the Frequency-Dependent Line Model on eMEGAsim Simulator	Reynaldo Iracheta Cortez, Norberto Flores Guzman and Rogelio Hasimoto
10:40 - 11:00	90	Computing Platform for Power Flow Models in Real Time	William Montaña Salamanca and Javier Rosero Garcia
11:00 - 11:20	86	The problem of the order of merit compensation in the Brazilian regulation in a thermoelectrical powerplant operation	Elton Soares, Daniel Barbosa and Kleber Freire

THURSDAY PARALLEL SESSIONS (Time: 11:50 - 14:10)			
Electromagnetic Transients and Equipment	Venue: Room A	Chair: Dr. Enrique Melgoza Vazquez	
Time	Paper ID	Title	Author(s)
11:50-12:10	29	Electromagnetic Transients in a 1000 kV System - Part I - Modeling and Arc Extinction	José Antonio Jardini, Patricia Silveira, Felipe Pedroso, Sergio Frontin, Geraldo Luiz Nicola, John Francis Graham and Patricia Borin
12:10-12:30	31	Electromagnetic Transients in a 1000 kV System - Part II – Line Energization, Reclosing and Insulation Coordination	José Antonio Jardini, Marcos Tiago Bassini, Gerson Yukio Saiki, Geraldo Luiz Costa Nicola, John Francis Graham, Patricia de Oliveira Freitas Borin and Liu Guijun
12:30-12:50	28	Electromagnetic Transients in a 1000 kV System - Part III - Fault inception, clearing and load rejection	José Antonio Jardini, Marcos Tiago Bassini, Ricardo Leon Vasquez-Arnez, Sergio Oliveira Frontin, Geraldo Luiz Costa Nicola, John Francis Graham, Patricia de Oliveira Freitas Borin and Liu Guijun
12:50-13:10	5	North American ac circuit outages initiated by transmission equipment failures and human error	Svetlana Ekisheva, Mark Lauby and Howard Gugel
13:10-13:30	124	Applications of computational electromagnetism in electric power engineering	Enrique Melgoza-Vazquez, Rafael Escarela-Perez and Manuel Antonio Corona Sanchez
13:30-13:50	25	Experimental and Numerical Analysis of Shorted Interlaminations in Transformer Cores	Ivan Hernandez Robles, Juan Carlos Olivares, Rafael Escarela-Perez, Irvin Lopez-Garcia, J. Luis Hernandez-Avila and Salvador Magdaleno-Adame
13:50-14:10	50	A Comparative Study Among Three Methods for Classification and Location of Faults	Patricia Poloni, Jonas Roberto Pesente and Rodrigo A. Ramos





THURSDAY PARALLEL SESSIONS (Time: 11:50 - 14:10)			
Electricity Markets and Economics	Venue: Room C	Chair: Dr. J. Horacio Tovar Hernandez	
Time	Paper ID	Title	Author(s)
11:50-12:10	17	Demand Side Management through LAB+i Platform: Case Study	Sandra Tellez, Julio Chinchilla-Guarín, Oscar Duarte and Javier Rosero Garcia
12:10-12:30	136	Cooking and water heating with LPG or Electricity – an economic assessment with policy issues	Jenny Acuña, Leonardo Moncada and Paul Vasquez
12:30-12:50	78	Study of Relationship between Electricity Consumption and Economic Growth in Sichuan Province	Lipin Chen, Haiyan Wang, Ruiguang Ma, Kaijiang Cao, Zhichao Ren and Wei Wang
12:50-13:10	7	Technical and Economic Assessment of a STATCOM Allocation in the Colombian Power System: a Case Study	Jose David Gomez Jimenez, Guillermo Vinasco and Jesus Lopez
13:10-13:30	63	Some Issues Related to the Regulatory Framework and Organizational Structure of the Central American Electricity Market	Wilfredo César Flores Castro
13:30-13:50	118	The Effect of Dominated and Dominating Contingencies on the Power Market in Colombia	Ruben Jaramillo and Harold Salazar
13:50-14:10	132	The Regulatory Reforms in the Argentine Wholesale Electricity Market Present Situation	Javier Barrionuevo and Ricardo German Rubio-Barros

THURSDAY PARALLEL SESSIONS (Time: 11:50 - 13:50)			
Power Systems Control and Oscillations	Venue: Room Ocampo	Chair: Dr. Enrique Arnoldo Zamora Cardenas	
Time	Paper ID	Title	Author(s)
11:50-12:10	9	VOLTAGE/FREQUENCY JOINT CONTROL FOR THE RESTORATION OF LOADS IN REGIONAL ELECTRIC SYSTEM	Rodolfo Edgar Rosés
12:10-12:30	38	Secondary Voltage Control Areas through Energy Levels	Julian Lopez Rios, Alejandro Zamora Mendez, Mario Arrieta Paternina, Antonino Lopez Rios and Ernesto Vazquez Martinez
12:30-12:50	125	Robust Wide Area Control in Power Systems Using Linear Matrix Inequalities	Maria Victoria Gasca, Alejandro Garcés and Sandra Pérez
12:50-13:10	61	Unblocking Function of Distance Relay during Power Swing Based on Modal Analysis	S. Torres, H. Esponda, M. Andrade, E. Vazquez, M.R.A. Paternina, A. Zamora and Juan M Ramirez
13:10-13:30	44	Oscillation Source Location and Power System Stabilizer Tuning Using Synchrophasor Measurements	Pablo Verdugo, Jaime Cepeda, Aharon De La Torre, Diego Echeverría and Hermógenes Flores
13:30-13:50	71	Tuning of Power System Stabilizers - An Ecuadorian Case Study	Hugo Arcos, Franklin Quilumba and Jaime Cepeda

THURSDAY PARALLEL SESSIONS (Time: 11:50 - 13:50)			
Data Management and Applications	Venue: Room Las Rosas	Chair: Dr. Juan José Flores Romero	
Time	Paper ID	Title	Author(s)
11:50-12:10	11	Scalability Evaluation of the Data Aggregator Positioning Problem in Smart Grids	Guilherme Rolim, Diego Passos, Célio Albuquerque, Igor Moraes, Ricardo Carrano, Cledson Sousa, Arlan Bettiol, Luis Passos, Rafael Homma, Rodrigo Andrade and Fernando Molina
12:10-12:30	103	Clustering and Visualization of Electrical Load Profiles using Data Mining Techniques	Ana Berenice Aréchiga Reyna, Emilio Barocio Espejo, Jesus Ayon and Hector Garcia Baleon
12:30-12:50	107	A Big Data Analytics Methodology to Select Customers for Electricity Theft Inspection	Adriano Galindo Leal and Marcel Boldt
12:50-13:10	140	Customers' Demand Clustering Analysis Using Smart Meter Data	Juan Parra, Franklin Quilumba and Hugo Arcos
13:10-13:30	110	Koopman Mode Analysis of very Large Datasets: Numerical Experience	Marcos Hernández and A.R. Messina
13:30-13:50	112	Extraction of spatiotemporal patterns from Measured Data via adaptive Laplacian eigenfunctions	Claudia M. C. Arvizu and A. R. Messina





## FRIDAY SEPTEMBER 23

FRIDAY PARALLEL SESSIONS (Time: 10:00 - 11:00)			
Power System Applications II	Venue: Room A	Chair: Dr. Emilio Barocio Espejo	
Time	Paper ID	Title	Author(s)
10:00 - 10:20	117	Fourier-Based Accurate Reduced-Order Model for Linear Power Systems Applications	C.M. Rergis, A. R. Messina and R.J Betancourt
10:20 - 10:40	36	Adjustment of Frequency Transient Response with reserve deficit using Artificial Neural Network	Esteban Agüero, Delia Colomé and Nelson Granda
10:40 - 11:00	41	Novel Approaches for Multi-Channel Ringdown Analysis Using Digital Filters	Alejandro Zamora, Vaithianat Venkatasubramanian, Juan M Ramirez and Mario R Arrieta

FRIDAY PARALLEL SESSIONS (Time: 10:00 - 11:00)			
Identification in Electrical Systems	Venue: Room C	Chair: Dr. Victor Gutierrez Martinez	
Time	Paper ID	Title	Author(s)
10:00 - 10:20	89	The Comprehensive Identification Model of Critical Lines in Power Grid Based on Utility Theory and Cooperative Game	Ran Li, Ziyu Lv, Chenxi Zhai and Yongbin Li
10:20 - 10:40	137	Identifying Voltage Stability Critical Areas Using k-means Clustering Technique	Juan Angarita, Sandra Perez and Juan Mora
10:40 - 11:00	114	Parameter Identification of Low Frequency Oscillations by Pade Method	Ramón Betancourt, Luis Contreras, Juan Miguel González, Emilio Barocio and Carlos Rergis

FRIDAY PARALLEL SESSIONS (Time: 10:00 - 11:20)			
Power Systems Optimization	Venue: Room Ocampo	Chair: Dr. Jaime Cerda Jacobo	
Time	Paper ID	Title	Author(s)
10:00 - 10:20	70	Short-Term Unit Commitment for Integrated Natural Gas and Electricity Infrastructures	Cecile Tovar-Ramírez, Alberto Martínez-Mares and Claudio Fuerte-Esquivel
10:20 - 10:40	108	A Multi-objective Optimization Strategy for the Economic Dispatch in a Microgrid	Ariel Sebastián Loyarte, Luis Alberto Clementi and Jorge Ruben Vega
10:40 - 11:00	148	A Novel Sequential Transient Stability Constrained Optimal Power Flow	Alejandro Pizano-Martinez, Claudio R. Fuerte-Esquivel, Enrique Zamora-Cardenas and J. Merced Lozano-Garcia
11:00 - 11:20	113	Large storage facilities valuation in integrated planning of natural gas and power systems	Diego M. Ojeda-Esteybar, Ricardo G. Rubio-Barros and Alberto Vargas

FRIDAY PARALLEL SESSIONS (Time: 10:00 - 11:00)			
Power Systems Applications III	Venue: Room Las Rosas	Chair: Dr. Elisa Espinosa Juarez	
Time	Paper ID	Title	Author(s)
10:00 - 10:20	51	Sag-Tension Calculation Program for Power Substations	Jorge Quintana, Víctor Garza and Angel Zamudio
10:20 - 10:40	87	Feasibility and Stability Analysis of a Water Transfer Project on a Subtransmission Network	Angel Recalde, Cesar Aguilar and Luis Galarza
10:40 - 11:00	67	Microgrid Frequency Stabilization Using Model Predictive Controller	Arun Verma, Hoay Beng Gooi, Abhisek Ukil, Narsa Reddy Tummuru and Sathish Kumar Kollimalla







FRIDAY PARALLEL SESSIONS (Time: 11:30 - 12:30)			
Electric Vehicles	Venue: Room A	Chair: Dr. Norberto Garcia Barriga	
Time	Paper ID	Title	Author(s)
11:30-11:50	45	GRASP Algorithm for Charging Coordination of Plug-In Electric Vehicle in Electrical Distribution Systems	Maria Nataly Bañol Arias, John Fredy Franco, Rubén Romero and Marina Lavorato de Oliveira
11:50-12:10	83	Analysis of Plug-in electric vehicles penetration in residential buildings under deterministic and stochastic scenarios	Andres D. Quevedo, Francisco Santamaria and Jorge A. Alarcón
12:10-12:30	55	Main motor controllers and regenerative braking of an electric vehicle	Rigoberto Jimenez, Cesar Ibarra and Juan M Ramirez

FRIDAY PARALLEL SESSIONS (Time: 11:30 - 12:30)			
Photovoltaic Systems	Venue: Room C	Chair: Dr. Domingo Torres Lucio	
Time	Paper ID	Title	Author(s)
11:30-11:50	98	Short-Term Photovoltaic Power Forecasting by Using a Hybrid of Nearest Neighbor and Artificial Neural Networks	Jose Luis Sanchez-Garcia, Elisa Espinosa-Juarez and Juan J. Flores
11:50-12:10	147	Decentralized control scheme for a photovoltaic system connected to the utility grid	Onofre Amador Morfin, Fernando Ornelas, Riemann Ruiz, Carlos Castaneda, Miguel Angel Murillo and Jehu Sanchez
12:10-12:30	24	Current control for a grid-connected inverter operating with highly distorted grid voltage	Julio Viola, Jose Restrepo, Jose Aller and Flavio Quizhpi

FRIDAY PARALLEL SESSIONS (Time: 11:30 - 12:50)			
Electrical Equipment III	Venue: Room Ocampo	Chair: Dr. Juan Carlos Olivares Galvan	
Time	Paper ID	Title	Author(s)
11:30-11:50	49	Connection Method Design for Redundant Elements of Composite Materials for Transmission Towers	Alberto Hernandez, Isaias Ramirez, Ramiro Hernandez, Julio Vergara, David Ponce, Alberto Brito, Carlos Hurtado and Antonio Paniagua
11:50-12:10	30	High Power Density Mobile Transformer Factory Tests	Thales Sousa, Jose Antonio Jardini, Marco Aurelio Bini, Adriano Nicioli, Joao Carlos Carneiro, Fumiaki Uemura and Masao Yasiro
12:10-12:30	19	New Approaches for the Use of Batteries on Mitigating Restrictions Caused by Delayed Expansion Projects on the Colombian NTS	Raúl Rodríguez, Nicolás Achury, Antonio Jiménez, Jhon Zárate and Marco Caro
12:30-12:50	2	Turn-to-turn Over-voltage Generation Method for Dry-type Air-core Reactors	Chaohai Zhang and Hongyan Nie

FRIDAY PARALLEL SESSIONS (Time: 11:30 - 12:30)			
Power Systems Applications IV	Venue: Room Las Rosas	Chair: Dr. Cesar Angeles Camacho	
Time	Paper ID	Title	Author(s)
11:30-11:50	92	Dynamic Reactive Power Compensation: Opportunities and Challenges in the Mexican Grid	Marcio Oliveira and Mikael Halonen
11:50-12:10	32	Analysis of Fulfillment of LVRT Requirements under Unbalanced Operating Conditions	Rafael Cruz Borges, Rodrigo Andrade Ramos and Romeu Reginatto
12:10-12:30	59	Analysis of the Influence of the FIDVR Problem in the Operation of a DFIG under Unbalanced Conditions	Rafael Cruz Borges and Rodrigo Andrade Ramos

