IPST 2023 Final Schedule

Time	Sunday June 11, 2023	Monday June 12, 2023	Tuesday June 13, 2023	Wednesday June 14, 2023	Thursday June 15, 2023
08:00 – 08:30		Authors/Chair Meeting (1A, 1B)	Authors/Chair Meeting (4A,5A / 4B, 5B)	Authors/Chair Meeting (8A, 9A / 8B, 9B)	Authors/Chair Meeting (11A, 12A / 11B, 12B)
08:30 – 10:30		Opening Ceremony & Keynote (Timber Hall)	Technical Sessions (4A, 4B)	Technical Sessions (8A, 8B)	Technical Sessions (11A, 11B)
10:30 – 10:45		Exhibition & Coffee Break (Grand Pietra Hall)			
10:45 – 12:45		Technical Sessions (1A, 1B)	Technical Sessions (5A, 5B)	Technical Sessions (9A, 9B)	Technical Sessions (12A, 12B)
12:45 – 13:45	13:00 – 17:15 Workshop on Grid forming control and EMT Studies (Pre-conference workshop organized by RTE and SIEMENS - Energy) (Timber I)	Lunch (Grand Pietra Hall)			
12:45 – 13:45		13:15 – 13:45 Authors/Chair Meeting (2A, 3A / 2B, 3B / 2C)	13:15 – 13:45 Authors/Chair Meeting (6A, 7A / 6B, 7B)	13:15 – 13:45 Authors/Chair Meeting (10A, 10B)	Closing Ceremony (Timber Hall)
13:45 – 15:45		Technical Sessions (2A, 2B, 2C)	Technical Sessions (6A, 6B)	Technical Sessions (10A, 10B)	
15:45 – 16:00		Exhibition & Coffee Break (Grand Pietra Hall)			
16:00 – 17:20	Registration 15:00 - 19:00 (Grand Pietra Hall)	Technical Sessions (3A, 3B)	Technical Sessions (7A, 7B)	Visit to Vergina Archaeological site Visit to Gerovasileiou winery	
17:30 – 20:00		Thessaloniki Guided Tour			
19.30	Welcome Reception (Minor Hall)		Banquet (Ktima Deda)		

○ Authors/Chair Meeting Schedule

Authors/Chair Meeting	Date	Time	Room
1A, 1B	Mon. 12th June	08:00 – 08:30	1A: Timber, 1B: Dock Six I
2A, 2B, 2C	Mon. 12th June	13:15 – 13:45	2A: Timber, 2B: Dock Six I, 2C: Dock Six II
3A, 3B	Mon. 12th June	13:15 – 13:45	3A: Timber, 3B: Dock Six I
4A, 4B	Tue. 13th June	08:00 – 08:30	4A: Timber, 4B: Dock Six
5A, 5B	Tue. 13th June	08:00 – 08:30	5A: Timber, 5B: Dock Six
6A, 6B	Tue. 13th June	13:15 – 13:45	6A: Timber, 6B: Dock Six
7A, 7B	Tue. 13th June	13:15 – 13:45	7A: Timber, 7B: Dock Six
8A, 8B	Wed. 14th June	08:00 – 08:30	8A: Timber, 8B: Dock Six
9A, 9B	Wed. 14th June	08:00 – 08:30	9A: Timber, 9B: Dock Six
10A, 10B	Wed. 14th June	13:15 – 13:45	10A: Timber, 10B: Dock Six
11A, 11B	Thu. 15th June	08:00 – 08:30	11A: Timber, 11B: Dock Six
12A, 12B	Thu. 15th June	08:00 – 08:30	12A: Timber, 12B: Dock Six

IPST 2023 Paper Sessions

Day	Time	Session, Room	Session Title	Session Chair	Paper ID
Mon 12th	08:30 – 10:30		Opening Ceremony and Keynote Session	-	-
	10:45 – 12:45	1A	Transmission Lines and cables I	Sebastien Dennetiere	2, 48, 96, 117, 119, 122
		1B	Real-Time Simulators	Jean Mahseredjian	24, 40, 68, 73, 74, 80
	13:45 – 15:45	2A	Systems Dynamics I	Ilhan Kocar	3, 44, 66, 98, 135, 136
		2B	System Protection I	Pablo Gomez	4, 28, 59, 79, 106, 121
		2C	Power Electronics, FACTS, HVDC I	Hani Saad	9, 33, 49, 63, 81, 141
	16:00 – 17:20	3A	Transformers, Reactors, Inrush currents	Alain Xemard	14, 19, 42, 86
		3B	Power Electronics, FACTS, HVDC II	Aniruddha M. Gole	58, 78, 99, 129
Tue 13th	08:30 – 10:30	4A	Systems Dynamics II	Simon Papenheim	10, 39, 51, 65, 108, 120
		4B	Power Electronics, FACTS, HVDC III	Shaahin Filizadeh	12, 22, 46, 50, 95, 138
	10:45 – 12:45	5A	Lightning Surges and Insulation Coordination I	Carlo Alberto Nucci	5, 16, 56, 87, 104, 134
		5B	Solution Methods and Algorithms I	Jeewantha de Silva	1, 7, 41, 77, 88, 133
	13:45 – 15:45	6A	Fault Transients & Temporary Overvoltages	Stephan Pack	36, 45, 54, 103, 125, 137
		6B	System Protection II	Tarlochan Sidhu	6, 31, 64, 90, 107, 116
	16:00 – 17:20	7A	Renewable Energy Sources	Reza Iravani	26, 29, 113, 124
		7B	Switching and Fault Transients I	Theofilos Papadopoulos	53, 71, 91, 112
Wed 14th	08:30 – 10:30	8A	Solution Methods and Algorithms II	Maria Teresa Barros	27, 69, 75, 85, 110, 111
		8B	System Protection III	Marjan Popov	20, 43, 83, 102, 118, 128
	10:45 – 12:45	9A	Switching and Fault Transients II	Maria Cristina Tavares	23, 30, 67, 84, 114, 115
		9B	Harmonics & Power Quality	Zia Emin	13, 15, 52, 76, 94, 139
	13:45 – 15:45	10A	Solution Methods and Algorithms III	Antonio Carlos Lima	34, 62, 70, 72, 105, 140
		10B	System Protection IV	Athula Rajapakse	8, 35, 55, 61, 93, 123
Thr 15th	08:30 – 10:30	11A	Lightning Surges and Insulation Coordination II	Pantelis Mikropoulos	11, 37, 57, 101, 130, 131
		11B	Power Electronics, FACTS, HVDC IV	Taku Noda	18, 21, 32, 47, 127
	10:45 – 12:45	12A	Transmission Lines and Cables II	Ivo Uglešić	17, 25, 38, 92, 100, 132
		12B	Solution Methods and Algorithms IV	Luis Naredo	60, 82, 89, 97, 109, 126

Monday 12th June (Sessions 1A, 1B)

8:00-8:30	Authors/Chair Meeting in Session Rooms	
8:30-10:30	Opening Ceremony and Keynote Session	
10:30-10:45	Coffee Break	
10:45	**Session:** **1A, Transmission Lines and cables I**	**Session:** **1B, Real-Time Simulators**
	Room: Timber	Room: Dock Six I
	Chair: Sebastien Dennetiere	Chair: Jean Mahseredjian
	2 - *T. A. Papadopoulos* Transient Induced Voltages on aboveground Pipelines Parallel to Overhead Transmission Lines	24 - *Harshani Konara* Co-simulation of Real-Time Electromagnetic Transient and Transient Stability Simulations Using Dynamic Phasor T-Line Model
11:05	48 - *F. Uribe* An Investigation of Earth and Sea-Return Impedances of Power Electrical Cables	40 - *Boris Bruned* Sparse Solver Application for Parallel Real-Time Electromagnetic Transient Simulations
11:25	96 - *F. V. Lopes* Three-Parameter ATP/ATPDraw Transmission Line High Impedance Fault Model	68 - *Yohei Tanaka* Study of a Numerical Integration Method using the Compact Scheme for Electromagnetic Transient Simulations
11:45	117 - *R. Alipio* Tower-foot Grounding Model for EMT Programs based on Transmission Line Theory and Marti's Model	73 - *Philippe Le-Huy* Hybrid SVC-VSC Modeling Approaches for Hardware-in-the-Loop Simulation
12:05	119 - *Felipe Camara* Admittance-based Modeling of Cables and Overhead Lines by Idempotent Decomposition	74 - *Philippe Le-Huy* Lessons Learned in Porting Offline Large-Scale Power System Simulation to Real-Time for Wide Area Monitoring, Protection and Control
12:25	122 - *D. C. Alberto* Small-argument Analytical Expressions for the Calculation of the Ground-Return Impedance and Admittance of Underground Cables	80 - Murilo Leandro Franco Modeling and Normative Instructions for the Application of EMTP-based Programs in the Evaluation of Medium Voltage Circuit-Breakers in a Real Industrial System
12:45	Sessions End	
12:45-13:45	Lunch	

Monday 12th June (Sessions 2A, 2B, 2C)

13:15-13:45	Authors/Chair Meeting in Session Rooms		
	Session: 2A, Systems Dynamics I	Session: 2B, System Protection I	Session: 2C, Power Electronics, FACTS, HVDC I
13:45	Room: Timber	Room: Dock Six I	Room: Dock Six II
	Chair: Ilhan Kocar	Chair: Pablo Gomez	Chair: Hani Saad
	3 - *Eleftherios O Kontis* Application of a Performance Assessment Method to Identify the Applicability Range of Distribution Network Equivalent Models	4 - *Paolo Marini* Protection Issues for Under-Impedance Relay used as Starting Supervision for Large Synchronous Motors	9 - *Shaahin Filizadeh* An Accelerated Detailed Equivalent Model for Modular Multilevel Converters
14:05	44 - *Rodrigo de Almeida Coelho* Real-Time Wavelet-based Distribution Systems Disturbances Detection	28 - *Milan Jankovski* Novel Busbar Protection Scheme for Impedance-earthed Distribution Networks	33 - *Pedro Machado de Almeida* Multivariable Analysis and Control of a VSC Back-to-Back Converter Interfacing Two ac Systems
14:25	66 - *Eleftherios Kontis* Inertia Estimation of Multi-Area Power Systems using Tie-Line Measurements and Modal Sensitivity Analysis	59 - *Dinesh Rangana Gurusinghe* Protection against Sub-Synchronous Oscillations, A Relay Model	49 - *Matheus Bassani Luchini* Equivalent Grid-Following Inverter-based Generator Model for Fast Time-Domain Simulations
14:45	98 - *Ioannis F. Gonos* Evaluation of the Solid-State Breakers on the Performance of Power Distribution Grids with High-RES Penetration	79 - *Nina Stipetic* LF Signal Injection for Earth-fault Localization in Unearthed Distribution Network	63 - *Ting Lin* Adaptive fault ride through control of VSM Grid-Forming Converters
15:05	135 - *Fernando Henrique Silveira* Modeling Guyed Towers of Transmission Lines in the Assessment of Backflashover Occurrence	106 - *Jose Raimundo Raimundo Junior* Two-Terminal Traveling-Wave-based Non-Homogeneous Transmission-Line Protection	81 - *Júlio César Cândido Vieira* Fault Diagnosis in Bipolar HVDC Systems based on Traveling Wave Theory by Monitoring Data from One Terminal
15:25	136 - *Georgia Saridaki* An investigation of factors affecting Fast-Interaction Converter-driven Stability in Microgrids	121 - *Raphael Leite de Andrade Reis* Evaluation of Single-Ended Impedance-Based Transmission Fault Location Using Fixed and Variable Window Phasor Estimation Approaches	141 – *Domagoj Hart* Implications of faults on insulation coordination of dedicated metallic return on bipolar HVDC overhead transmission lines
15:45	Sessions End		
15:45-16:00	Exhibition & Coffee Break		

Monday 12th June (Sessions 3A, 3B)

	Session: 3A, Transformers, Reactors, Inrush currents	Session: 3B, Power Electronics, FACTS, HVDC II
16:00	Room: Timber	Room: Dock Six I
	Chair: Alain Xemard	Chair: Aniruddha M. Gole
	14 - *Byungchul Sung* Accurate Transformer Inrush Current Analysis by Controlling Closing Instant and Residual Flux	58 - *Vinícius Albernaz Lacerda* Phasor and EMT Models of Grid-following and Grid-forming Converters for Short-circuit Simulations
16:20	19 - *Viktor Milardić* Extraction of Transformer Saturation Curve from Ferroresonance Measurements based on Nelder- Mead Optimization Method	78 - *Viktor Rudan* On Control Interaction Studies of HVDC-connected OWFs – Carbon Trust OWA Project
16:40	42 - *Felipe Luis Probst* Modeling of a Capacitive Voltage Transformer for Evaluation of Transient Response in Conformity with the IEC 61869-5 Standard	99 - *Adriano Fazolo Nardoto* Model Predictive Control for Solid State Transformer
17:00	86 - *Bozidar Filipovic-Grcic* Impact of Autotransformer Inrush Currents on Differential Protection Operation	129 - *Juan Velásquez* On-site Measurement of the Hyteresis Curve for Improved Modelling of Transformers
17:20	Sessions End	
17:30-20:00	Cultural Visit	

Tuesday 13th June (Sessions 4A, 4B)

08:00-08:30	Authors/Chair Meeting in Session Rooms	
08:30	Session: 4A, System Dynamics II	Session: 4B, Power Electronics, FACTS, HVDC III
	Room: Timber	Room: Dock Six
	Chair: Simon Papenheim	Chair: Shaahin Filizadeh
	10 - *Reza Pourramezan* Synchrophasor Network-Based Detection and Classification of Power System Events: A Singular Value Decomposition Approach	12 - *Anton Stepanov A* Modeling of MMC-based STATCOM with Embedded Energy Storage for the Simulation of Electromagnetic Transients
08:50	39 - *Nils Pfeifer* Analytical and Numerical Study of an Iron-Core Shunt-Compensation Reactor on a Mixed Transmission Line	22 - *Pablo Gómez A* Analytical and Measurement-based Wideband Two-port Modeling of DC-DC Converters for Electromagnetic Transient Studies
09:10	51 - *Rikido Yonezawa* A Phase-Domain Synchronous Machine Modeling Technique by using Magnetic Circuit Representation of Armature and Rotor Windings	46 - *Shaahin Filizadeh* Analysis of Interactions among Parallel Grid-Forming Inverters
09:30	65 - *Eleftherios Kontis* On-line Tracking of Inertia Constants using Ambient Measurements	50 - *Tao Xue* Re-examination of Small-Signal Instability in Weak Grid-Connected Voltage Source Converters
09:50	108 - *Jorge Andrés Zamora* Characterization of a Capacitive Voltage Divider	95 - *Felipe Vigolvino Lopes A* Assessment of Traveling Wave-based Functions in Inverter-based Resource Interconnecting Lines
10:10	120 - *Nasim Rashidirad* Unified MANA-based Load-Flow for Multi-Frequency Hybrid AC/DC Multi-Microgrids	138 - *Guilherme Cirilo Leandro* A Steady-State Initialization Procedure for Generic Voltage-Source Converters in Electromagnetic Transient Simulations
10:30	Sessions End	
10:30-10:45	Exhibition & Coffee Break	

Tuesday 13th June (Sessions 5A, 5B)

	Session: 5A, Lightning Surges and Insulation Coordination I	Session: 5B, Solution Methods and Algorithms I
10:45	Room: Timber	Room: Dock Six
	Chair: Carlo Alberto Nucci	Chair: Jeewantha de Silva
	5 - *Franjo Vukovic* Development and Laboratory Testing of a Lightning Current Measurement System for Wind Turbines	1 - *Ajay Digamber Shetgaonkar* Zero-current Suppression Control for Fault Current Damper based on Model Predictive Control
11:05	16 - *Akifumi Yamanaka* Influence of a Shield Wire Flashover on the Indirect Lightning Performance Assessment of Distribution Lines	7 - *Willy Arnaud Nzale Mimbe* A Tool for Automatic Determination of Model Parameters using Particle Swarm Optimization
11:25	56 - *Kai Yin* The Lightning Performance of a 400 kV Composite Pylon with Cable as Down-lead	41 - *Dmitry Baimel* Neural Architecture Search (NAS) for designing Optimal Power Quality Disturbance Classifiers
11:45	87 - *Brandon Steven Ardila* Modeling Lightning Flashes in Transmission Structures	77 - *Shaahin Filizadeh* A Multi-Solver Framework for Co-Simulation of Transients in Modern Power Systems
12:05	104 - *Fabio Tossani* Evaluation of Lightning-Originated Stress on Distribution Class Surge Arresters	88 - *Ilhan Kocar* Wideband Model based on Constant Transformation Matrix and Rational Krylov Fitting
12:25	134 - *Silvério Visacro* Differences on the response of transmission lines subjected to the currents of negative and positive lightning flashes: influence of ground terminations	133 - *Kfir J Dagan* A Novel Approach to Power Loss Calculation for Power Transformers supplying Nonlinear Loads
12:45	Sessions End	
12:45-13:45	Lunch	

Tuesday 13th June (Sessions 6A, 6B)

13:15-13:45	Authors/Chair Meeting in Session Rooms	
	Session: **6A, Fault Transients & Temporary Overvoltages**	**Session:** **6B, System Protection II**
13:45	Room: Timber	Room: Dock Six
	Chair: Stephan Pack	Chair: Tarlochan Sidhu
	36 - *Bruce Chen* Electro Magnetic Transient (EMT) Study of Overvoltages caused by Back Feeding an Isolated Transmission Mixed Overhead and Cable System	6 - *Jagannath Wijekoon* Instantaneous Incremental Current-based Faulted Phase Selection Algorithm
14:05	45 - *Selma Awadallah* Transient Overvoltage Transfer and Amplification in a 400kV - A Case Study	31 - *Mert Bekir Atsever* A Faulty Feeder Selection Method for Distribution Network with Unintentional Resonance in Zero Sequence Circuit
14:25	54 - *Alain Xemard* Risk of Voltage Escalation due to a Single-Phase Fault on the Ungrounded MV Network of an Industrial Plant	64 *Kasun Chamara Samarawickrama* Generator Out-of-step Protection using the Trajectory of Estimated Relative Speed
14:45	103 - *Anderson Ricardo Justo De Araujo* Full-wave Electromagnetic Analysis of Lightning Strikes to Wind Farm Connected to Medium-Voltage Distribution Lines	90 - *Eduardo Passos Aquino Ribeiro* Assessment of Communication Channel Effects on Time-Domain Protection Functions Tripping Times
15:05	125 - Thassio Matias Pereira Overvoltages Due to Line Faults on a HWL Transmission Line: Corona Effect and Mitigation Techniques	107- *Raphael Leite de Andrade Reis* Traveling Wave-based Fault Locators: Performance Analysis in Series-Compensated Transmission Lines
15:25	137 - *Rodrigo Sousa Ferreira* Transient Overvoltages due to Intermittent-ground Faults in an Industrial Power System Grounded by a Resistance connected to the Secondary of a Grounding Transformer	116 - *Eubis Pereira Machado* Phasor Correction of Coupling Capacitor Voltage Transformers for High-performance Protection
15:45	Sessions End	
15:45-16:00	Exhibition & Coffee Break	

Tuesday 13th June (Sessions 7A, 7B)

	Session: 7A, Renewable Energy Source	Session: 7B, Switching and Fault Transients I
16:00	Room: Timber	Room: Dock Six
	Chair: Reza Iravani	Chair: Theofilos Papadopoulos
	26 – *Baimel Dmitry* A New Resonant Fault Current Limiter for Improved Wind Turbine Transient Stability	53 - *Felipe Luis Probst* Measurement of Switching Transient Overvoltages with a Capacitive Electric Field Sensor
16:20	29 - *Robert Rogersten* The Swedish Transmission System Operator's Perspective on Planning Series-compensated Network Sections containing Wind Power Plants	71 - *Mustafa Kizilcay* Secondary Arc Duration on a 380-kV Mixed Transmission Line during SPAR
16:40	113 - *Luann Georgy Oliveira Queiroz* Single-phase PV Generator Model for Distribution Feeders considering Voltage Ride Through (VRT) Conditions	91 - *Arif Mehdi* Squaring and Lowpass Filtering Data-driven Technique for AC Faults in AC/DC Lines
17:00	124 - *Ilhan Kocar* Comparison of Internal Voltage Vectors of DFIG-based Wind Turbine Generator and Synchronous Generator during Asymmetrical Fault	112 - *Rohit Shrikrushnarao Thute* Impact of Superconducting Fault Current Limiter with Delayed Recovery on Transient Rotor Angle Stability
17:20	**Sessions End**	

Wednesday 14th June (Sessions 8A, 8B)

08:00-08:30	**Authors/Chair Meeting in Session Rooms**	
08:30	**Session:** **8A, Solution Methods and Algorithms II**	**Session:** **8B, System Protection III**
	Room: Timber	Room: Dock Six
	Chair: Maria Teresa Barros	Chair: Marjan Popov
	27 - *Mozaffar Etezadifar* Non-intrusive Load Monitoring: Comparative Analysis of Transient State Clustering Methods	20 - *Moisés Junior Batista Borges Davi* Study on IEEE 2800-2022 Standard Benefits for Transmission Line Protection in the Presence of Inverter-based Resources
08:50	69 - *Philippe Le-Huy* Performance Evaluation of Communication Fabrics for Offline Parallel Electromagnetic Transient Simulation based on MPI	43 - *Aline Flavia Nonato da Costa Moro* Power Differential Protection for Half-wavelength Transmission Lines - Software in the Loop Analysis
09:10	75 - *Shaahin Filizadeh* Improved Methods for Optimization of Power Systems with Renewable Generation Using Electromagnetic Transient Simulators	83 - *Bozidar Filipovic-Grcic* Specific Aspects of Overvoltage Protection in Hydro Power Plant considering AIS and GIS Connection to the Transmission Network
09:30	85 - *Jesus Morales Rodriguez* A New Tool for Calculation of Line and Cable Parameters	102 - *Gabriella Pinheiro Santos* Enhanced Voltage Relay for AC Microgrid Protection
09:50	110 - *Keijo Jacobs* A Comparative Study on Frequency Scanning Techniques for Stability Assessment in Power Systems incorporating Wind Parks	118 - *Rafael Lucas da Silva França* One-terminal Traveling Wave-based Transmission Line Protection for LCC-HVDC Systems
10:10	111 - *Caio Vinicius Colozzo Grilo* A Travelling Wave-based Fault Locator for Radial Distribution Systems using Decision Trees to Mitigate Multiple Estimations	128 - *Flavio Bezerra Costa* Low-sampling Frequency Two-terminal Traveling Wave-based Overhead Transmission Line Protection
10:30	**Sessions End**	
10:30-10:45	**Exhibition & Coffee Break**	

Wednesday 14th June (Sessions 9A, 9B)

	Session: 9A, Switching and Fault Transients II	Session: 9B, Harmonics & Power Quality
	Room: Timber	Room: Dock Six
	Chair: Maria Cristina Tavares	Chair: Zia Emin
10:45	23 - *Farzad Nasirpour* High-Frequency Transformer Winding Model with Adequate Protection	13 - *J.A. Gutiérrez-Robles* Extended Vector Fitting for the Assessment of Subharmonics, Harmonics, Interharmonics, and Supraharmonics in Electrical Systems
11:05	30 - *Bozidar Filipovic-Grcic* Transient Recovery Voltage Investigation on HV Circuit Breaker in Hydro Power Plant	15 - *Raúl Enrique Rojas Varela* Ferroresonance Mitigation for the Unconventional Rural Electrification System
11:25	67 - *Haoyan Xue* Tribute to Prof. Akihiro Ametani for Contributions to Research on Power System Transients	52 - *Fani Barakou* Parameter Analysis on the Harmonic Amplification for Offshore Wind Power Plants: A Case Study in the Netherlands
11:45	84 - *Konstantinos Velitsikakis* 33 kV Cable Connector Failures due to Shunt Reactor Switching by means of Vacuum Circuit Breaker – A Thorough Investigation & Mitigation Analysis	76 - *Gaurish Gokhale* Ferroresonance Case Study in a Distribution Network and the Potential Impact of DERs and CVR/VVO
12:05	114 - *Myriam Ratajczyk* From pole-to-ground fault current return paths in a meshed HVDC network to a grounding modelling simplification for protection studies	94 - *Sergio Martin-Martinez* Comparison of harmonic emission in LV side of a large grid connected PV power plant
12:25	115 - *Taoufik Qoria* Grid-Forming Control VSC-Based Including Current Limitation and Re-synchronization Functions to Deal with Symmetrical and Asymmetrical Faults	139 - *Takuya Shoji* A Study of Harmonics in a Dedicated Cable Supply System to feed EV Fast Chargers
12:45	Sessions End	
12:45-13:45	Lunch	

Wednesday 14th June (Sessions 10A, 10B)

13:15-13:45	Authors/Chair Meeting in Session Rooms	
13:45	**Session:** 10A, Solution Methods and Algorithm III	**Session:** 10B, System Protection IV
	Room: Timber	Room: Dock Six
	Chair: Antonio Carlos Lima	Chair: Athula Rajapakse
	34 - *Joan Sebastian Chaves Huertas* Rural electrification method based on floating wires induced voltage: Technical and economical analysis	8 – *Pedro Henrique Aquino Barra* Multi-agent System-based Microgrid Protection using Angular Variation: An Embedded Approach
14:05	62 - *Jeewantha De Silva* An Enhanced Method to achieve Exact DC Values for Frequency Dependent Transmission Lines	35 - *Joachim Vermunicht* Analysing the Performance of Incremental Quantity based Directional Time-Domain Protection near HVAC Cables and VSC HVDC Converters
14:25	70 - *Thiago Silva Amorim* Inverter Controller with Synthetic Inertia and Adaptive Harmonic Damping Based on Fourier Linear Combiners	55 - *Thomas Treider* Polarity Crossover Regions of Transient Earth Fault Relays in Non-Radial Resonant Grounded Networks
14:45	72 - *Sebastien Dennetiere* Parallelization of EMT simulations for Integration of Inverter-based Resources	61 - *Tarlochan Sidhu* A New Protection Scheme for Feeders of Microgrids with Inverter-Based Resources
15:05	105 - *Alexandre Akira Kida* Inaccuracies due to the Frequency Warping in Simulation of Electrical Systems using Combined State-space Nodal Analysis	93 – *Muhammad Saad* Detection of Secondary Arc Extinction and Autoreclosing in Compensated AC Transmission Lines based on Machine Learning
15:25	140 – *Ilhan Kocar* Passivity Enforcement of Wideband Model through a New and Full Perturbation Formulation	123 - *Maria Leonor Silva Almeida* An Investigation of Distance Protection Function applied for Shunt Reactors
15:45	Sessions End	
15:45-16:00	Exhibition & Coffee Break	
16:00-20:00	Cultural Visit	

Thursday 15th June (Sessions 11A, 11B)

08:00-08:30	**Authors/Chair Meeting in Session Rooms**	
08:30	**Session:** **11A, Lightning Surges and Insulation Coordination II**	**Session:** **11B, Power Electronics, FACTS, HVDC IV**
	Room: Timber	Room: Dock Six
	Chair: Pantelis Mikropoulos	Chair: Taku Noda
	11 - *Thomas Tsovilis* A Simplified Transient Model of Surge Protective Devices Employing Varistors	18 - *Georgios Kryonidis* Use of Ultracapacitor for Provision of Inertial Response in Virtual Synchronous Generator: Design and Experimental Validation
08:50	37 - *Haoyan Xue* Parametric Study of Equivalent Homogeneous Earth Method for Overhead Lines above A Multi-Layer Earth	21 - *Kalliopi D. Pippi* Transient Performance of a Unified Control System for the Provision of Ancillary Services in Low-Voltage Distribution Networks
09:10	57 - *Silvia Sincic* The Principles of a New Line Surge Arrester's Transient Current Measurement System	32 - *Zia Emin* Transformer and Line Energisation via Grid Forming Converter based on Multi-Loop Droop Control
09:30	101 - *Alexios Ioannidis* Estimating the Shielding Failure Flashover Rate of Single-Circuit Overhead Lines with Horizontal Phase Configuration via Stochastic Lightning Attachment Simulations	47 - *Chen Jiang* Small Signal Analysis of a Grid-Forming Modular Multilevel Converter with a Novel Virtual Synchronous Generator Control
09:50	130 - *Thassio Matias Pereira* Analysis of Overvoltages across Line Insulator Strings considering the Ground-Wire and Phase Conductors Corona	127 - *Sara Ahmed* Modeling and Studying the Impact of Dynamic Reactive Current Limiting in Grid-following Inverters for Distribution Network Protection
10:10	131 - *Konstantinos Velitsikakis* Insulation Coordination for HVAC Cable Sheath Bonding Systems in Mixed OHL-UGC Connections using the Lightning Statistics: A Case Study for the Dutch 110 kV Transmission Grid	
10:30	**Sessions End**	
10:30-10:45	**Exhibition & Coffee Break**	

Thursday 15th June (Sessions 12A, 12B)

	Session: 12A, Transmission Lines and Cables II	Session: 12B, Solution Methods and Algorithms IV
	Room: Timber	Room: Dock Six
	Chair: Ivo Uglešić	Chair: Luis Naredo
10:45	132 - *Naiara Duarte* Assessment of the Transmission Line Theory in the Modeling of Multiconductor Underground Cable Systems for Transient Analysis using a Full-wave FDTD Method	60 - *Selma Grebovic* Application of Artificial Intelligence Methods for Determination of Transients in the Power System
11:05	17 - *Luc Gérin-Lajoie* GMD Impacts on Hydro-Québec System	82 - *Isabelle Löfgren* Analysis and Mitigation of SSCI when integrating Wind Power to Series Compensated Lines
11:25	25 - *A. I. Chrysochos* Impact of Solenoid Effects on Series Impedance of Three-Core Armoured Cables	89 - *Eduardo Passos Aquino Ribeiro* An Interpolation-based Solution to use Low Sampling Rate Records in Traveling Wave-based Fault Location Methods
11:45	38 - *Haoyan Xue* An Investigation of Electromagnetic Transient Characteristics on A Practical 500 kV Submarine Cable System	97 - *Kyeon Hur* An Improved High-accuracy Interpolation Method for Switching Devices in EMT Simulation Programs
12:05	92 - *Christos Melios* Instant EOFF Measurement Error in Cathodically Protected Pipelines: A Parametric Assessment Study	109 - *Lei Meng* A New Sequence Domain EMT-level Multi-input Multi-output Frequency Scanning Method for Inverter based Resources
12:25	100 - *Hemantkumar Hariram Goklani* A Robust Method for Transmission Line Sequence Parameter Estimation using Synchronised Phasor Measurements	126 - *Andressa Pereira Oliveira* Accuracy Analysis using the EMD and VMD for Two-terminal Transmission Line Fault Location based on Traveling Wave Theory
12:45	Sessions End	
12:45- 13:45	Lunch	
13:15- 13:45	Closing Ceremony	

Papers Approved

ID	Title
1	Zero-current Suppression Control for Fault Current Damper based on Model Predictive Control
2	Transient Induced Voltages on Aboveground Pipelines Parallel to Overhead Transmission Lines
3	Application of a Performance Assessment Method to Identify the Applicability Range of Distribution Network Equivalent Models
4	Protection Issues for Under-Impedance relay used as starting supervision for large synchronous motors
5	Development and Laboratory Testing of a Lightning Current Measurement System for Wind Turbines
6	Instantaneous Incremental Current-Based Faulted Phase Selection Algorithm
7	A Tool For Automatic Determination Of Model Parameters Using Particle Swarm Optimization
8	Multi-Agent System-Based Microgrid Protection Using Angular Variation: An Embedded Approach
9	An Accelerated Detailed Equivalent Model for Modular Multilevel Converters
10	Synchrophasor Network-Based Detection and Classification of Power System Events: A Singular Value Decomposition Approach
11	A Simplified Transient Model of Surge Protective Devices Employing Varistors
12	Modeling of MMC-based STATCOM with Embedded Energy Storage for the Simulation of Electromagnetic Transients
13	Extended vector fitting for the assessment of subharmonics, harmonics, interharmonics, and supraharmonics in electrical systems
14	Accurate Transformer Inrush Current Analysis by Controlling Closing Instant and Residual Flux
15	Ferroresonance Mitigation for the Unconventional Rural Electrification System
16	Influence of a Shield Wire Flashover on the Indirect Lightning Performance Assessment of Distribution Lines
17	GMD Impacts on Hydro-Québec system
18	Use of Ultracapacitor for Provision of Inertial Response in Virtual Synchronous Generator: Design and Experimental Validation
19	Extraction of Transformer Saturation Curve from Ferroresonance Measurements Based on Nelder- Mead Optimization Method
20	Study on IEEE 2800-2022 Standard Benefits for Transmission Line Protection in the Presence of Inverter-Based Resources
21	Transient Performance of a Unified Control System for the Provision of Ancillary Services in Low-Voltage Distribution Networks
22	Analytical and measurement-based wideband two-port modeling of DC-DC converters for electromagnetic transient studies
23	High-Frequency Transformer Winding Model with Adequate Protection
24	Co-simulation of Real-Time Electromagnetic Transient and Transient Stability Simulations Using Dynamic Phasor T-Line Model
25	Impact of Solenoid Effects on Series Impedance of Three-Core Armoured Cables
26	A New Resonant Fault Current Limiter for Improved Wind Turbine Transient Stability
27	Non-Intrusive Load Monitoring: Comparative Analysis of Transient State Clustering Methods
28	Novel Busbar Protection Scheme for Impedance-earthed Distribution Networks
29	The Swedish Transmission System Operator's Perspective on Planning Series-Compensated Network Sections Containing Wind Power Plants
30	Transient Recovery Voltage Investigation on HV Circuit Breaker in Hydro Power Plant
31	A Faulty Feeder Selection Method for Distribution Network with Unintentional Resonance in Zero Sequence Circuit

32	Transformer and Line Energisation via Grid Forming Converter based on Multi-Loop Droop Control
33	Multivariable Analysis and Control of a VSC Back-to-Back Converter Interfacing Two ac Systems
34	Rural electrification method based on floating wires induced voltage: Technical and economical analysis
35	Analysing the Performance of Incremental Quantity based Directional Time-Domain Protection near HVAC Cables and VSC HVDC Converters
36	Electro Magnetic Transient (EMT) Study of Overvoltages Caused by Back Feeding an Isolated Transmission Mixed Overhead and Cable System
37	Parametric Study of Equivalent Homogeneous Earth Method for Overhead Lines Above A Multi-Layer Earth
38	An Investigation of Electromagnetic Transient Characteristics on A Practical 500 kV Submarine Cable System
39	Analytical and Numerical Study of an Iron-Core Shunt-Compensation Reactor on a Mixed Transmission Line
40	Sparse Solver Application for Parallel Real-Time Electromagnetic Transient Simulations
41	Neural Architecture Search (NAS) for Designing Optimal Power Quality Disturbance Classifiers
42	Modeling of a Capacitive Voltage Transformer for Evaluation of Transient Response in Conformity with the IEC 61869-5 Standard
43	Power Differential Protection for Half-Wavelength Transmission Lines - Software in the Loop Analysis
44	Real-Time Wavelet-Based Distribution Systems Disturbances Detection
45	Transient Overvoltage Transfer and Amplification in a 400kV - A Case Study
46	Analysis of Interactions Among Parallel Grid-Forming Inverters
47	Small Signal Analysis of a Grid-Forming Modular Multilevel Converter with a Novel Virtual Synchronous Generator Control
48	An Investigation of Earth and Sea-Return Impedances of Power Electrical Cables
49	Equivalent Grid-Following Inverter-Based Generator Model for Fast Time-Domain Simulations
50	Re-examination of Small-Signal Instability in Weak Grid-Connected Voltage Source Converters
51	A Phase-Domain Synchronous Machine Modeling Technique by Using Magnetic Circuit Representation of Armature and Rotor Windings
52	Parameter analysis on the Harmonic Amplification for Offshore Wind Power Plants: a Case Study in the Netherlands
53	Measurement of Switching Transient Overvoltages with a Capacitive Electric Field Sensor
54	Risk of voltage escalation due to a single-phase fault on the ungrounded MV network of an industrial plant
55	Polarity Crossover Regions of Transient Earth Fault Relays in Non-Radial Resonant Grounded Networks
56	The lightning performance of a 400 kV composite pylon with cable as down-lead
57	The Principles of a New Line Surge Arrester's Transient Current Measurement System
58	Phasor and EMT Models of Grid-Following and Grid-Forming Converters for Short-Circuit Simulations
59	Protection Against Sub-Synchronous Oscillations, A Relay Model
60	Application of Artificial Intelligence Methods for Determination of Transients in the Power System
61	A New Protection Scheme for Feeders of Microgrids with Inverter-Based Resources
62	An Enhanced Method to Achieve Exact DC Values for Frequency Dependent Transmission lines
63	Adaptive fault ride through control of VSM Grid-Forming Converters
64	Generator Out-of-Step Protection Using the Trajectory of Estimated Relative Speed
65	On-Line Tracking of Inertia Constants Using Ambient Measurements

100	A Robust Method for Transmission Line Sequence Parameter Estimation using Synchronised Phasor Measurements.
101	Estimating the Shielding Failure Flashover Rate of Single-Circuit Overhead Lines with Horizontal Phase Configuration via Stochastic Lightning Attachment Simulations
102	Enhanced Voltage Relay for AC Microgrid Protection
103	Full-wave Electromagnetic Analysis of Lightning Strikes to Wind Farm Connected to Medium-Voltage Distribution Lines
104	Evaluation of Lightning-Originated Stress on Distribution Class Surge Arresters
105	Inaccuracies Due to the Frequency Warping in Simulation of Electrical Systems Using Combined State-space Nodal Analysis
106	Two-Terminal Traveling-Wave-Based Non-Homogeneous Transmission-Line Protection
107	Traveling Wave-Based Fault Locators: Performance Analysis in Series-Compensated Transmission Lines
108	Characterization of a Capacitive Voltage Divider
109	A New Sequence Domain EMT-Level Multi-Input Multi-Output Frequency Scanning Method for Inverter Based Resources
110	A Comparative Study on Frequency Scanning Techniques for Stability Assessment in Power Systems Incorporating Wind Parks
111	A Travelling Wave-Based Fault Locator for Radial Distribution Systems Using Decision Trees to Mitigate Multiple Estimations
112	Impact of Superconducting Fault Current Limiter with Delayed Recovery on Transient Rotor Angle Stability
113	Single-phase PV Generator Model for Distribution Feeders Considering Voltage Ride Through (VRT) Conditions
114	From pole-to-ground fault current return paths in a meshed HVDC network to a grounding modelling simplification for protection studies
115	Grid-Forming Control VSC-Based Including Current Limitation and Re-synchronization Functions to Deal with Symmetrical and Asymmetrical Faults
116	Phasor Correction of Coupling Capacitor Voltage Transformers for High-Performance Protection
117	Tower-foot Grounding Model for EMT programs Based on Transmission Line Theory and Marti's Model
118	One-Terminal Traveling Wave-Based Transmission Line Protection for LCC-HVDC Systems
119	Admittance-Based Modeling of Cables and Overhead Lines by Idempotent Decomposition
120	Unified MANA-Based Load-Flow for Multi-Frequency Hybrid AC/DC Multi-Microgrids
121	Evaluation of Single-Ended Impedance-Based Transmission Fault Location Using Fixed and Variable Window Phasor Estimation Approaches
122	Small-Argument Analytical Expressions for the Calculation of the Ground-Return Impedance and Admittance of Underground Cables
123	An investigation of distance protection function applied for shunt reactors
124	Comparison of Internal Voltage Vectors of DFIG-based Wind Turbine Generator and Synchronous Generator during Asymmetrical Fault
125	Overvoltages Due to Line Faults on a HWL Transmission Line: Corona Effect and Mitigation Techniques
126	Accuracy Analysis using the EMD and VMD for Two-Terminal Transmission Line Fault Location Based on Traveling Wave Theory
127	Modeling and Studying the Impact of Dynamic Reactive Current Limiting in Grid-Following Inverters for Distribution Network Protection
128	Low-Sampling Frequency Two-terminal Traveling Wave-based Overhead Transmission Line Protection
129	On-site Measurement of the Hyteresis curve for improved Modelling of Transformers
130	Analysis of Overvoltages Across Line Insulator Strings Considering the Ground-Wire and Phase Conductors Corona