



**15th World Congress on Engineering Asset Management**  
Virtual Event - 15-18 August, 2021

Organization:



Period (Basília time zone UTC-3)	15 Aug	Monday 16 Aug			Tuesday 17 Aug			Wednesday 18 Aug		
07h00 - 07h30		Opening ceremony & Welcome			ISEAM Awards			Best paper awards & 16th WCEAM announcement		
07h30 - 09h00	H E L P D E S K  S E R V I C E	Paper session MA1	Paper session MA2	Paper session MA3	Paper session TA1	Paper session TA2	Paper session TA3	Paper session WA1	Paper session WA2	Paper session WA3
09h00 - 10h30		<b>Keynote 1</b> Challenges with infrastructure to support Covid-19 vaccination roll-out Luiz Henrique Mandetta, former Brazilian Health Minister			<b>Keynote 2</b> Managing Airport Infrastructure during Covid-19 Dr Kofi Smith, CEO Keystone Management & former CEO Atlanta Airlines Terminal Company			<b>Keynote 3</b> Asset Control, Monitoring and Diagnostic in Industry 4.0 - Examples in the Oil&Gas Industry Mario Campos, CEO SmartAutomation		
10h30 - 12h00		10h30 - 11h15	<b>Panel Session</b> Research Trends in Asset Management - UFMS Brazil Ruben Baros / Luigi Galotto / Moacyr Brito		Paper session TB1	Paper session TB2	Paper session TB3	Paper session WB1	Paper session WB2	
12h00 - 13h30		Workshop Session MW1 Decision-Making Tools for PV Inverter Maintenance in Solar Power Plants Prof Huai Wang, Aalborgh University, Denmark		Workshop Session MW2 Motion Amplification and Machine Condition Monitoring Dan Nower P.E. ROI Technologies, Inc	Workshop Session TW1 On Climate Change Sustainability and Infrastructure Asset Management David Hood, Chair, Long Future Foundation		Workshop Session TW2 Reliability Excellence, including performance metrics and case studies Ron Moore, Managing Partner, The RM Group, Inc	Paper session WC1	Paper session WC2	
13h30 - 14h00			ISEAM Meeting			Organising Committee Meeting			Closing ceremony	



AUGUST 16th, 2021

Opening Session					
Date: Monday 16 Aug (Bonito, Brazil)			Time: 7:00 - 7:30 am (Brasilia Time UTC -3)		
Moderator: <a href="#">Joao Pinto</a>					
	Event	Speaker	Country	Brasilia's Time	Speaker's Local Time
	Brazilian welcome	Joao Pinto	Brazil (UTC -4)	7:00 - 7:10	6:00 - 6:10 AM
	ISEAM welcome	Joe Amadi-Echendu	South Africa (UTC +2)	7:10 - 7:30	12:10 -12:30 PM

Session - MA1 (Industry Presentations - Category C)					
Date: Monday 16 Aug (Bonito, Brazil)			Time: 7:30 - 9:00 am (Brasilia Time UTC -3)		
Chairs: <a href="#">Lutfiye Manli</a> & <a href="#">Dimitris Kyritsis</a>					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasilia's Time	Presenter's Local Time
4	Strategic asset management under energy transformation	Lutfiye Manli*	Australia (UTC +10)	7:30 - 7:50	8:30 PM
5	Digital asset management under energy transformation	Lutfiye Manli, Nathaniel Dunnett*	Australia (UTC +10)	7:50 - 8:10	8:50 PM
13	Ontologies and digitalization for achieving predictive maintenance: +GF+'s machine tool optimum production factory 4.0	Marlène Hildebrand, Dimitris Kyritsis*, Jérôme Clavel, Roberto Perez	Switzerland (UTC +2)	8:10 - 8:30	1:10 PM
33	Asset Management penetrates success culture in Saudi Aramco	Mohammed altawili	Saudi Arabian (UTC +3)	8:30 - 8:50	2:30 PM

Paper Session - MA2 (Category A)					
Date: Monday 16 Aug (Bonito, Brazil)			Time: 7:30 - 9:00 am (Brasilia Time UTC -3)		
Chairs: <a href="#">Antonio Guillen</a> & <a href="#">Adolfo Crespo</a>					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasilia's Time	Presenter's Local Time
76	Can Industry 4.0 keep its promises? A literature-based comparison of expectations and experiences.	Lasse Metso*, Nils Thenent	Finland (UTC +3)	7:30 - 7:50	1:30 PM
10	A maintenance management improvement framework for asset management	Renan F. da Silva*, Gilberto F. M. Souza	Brazil (UTC -3)	7:50 - 8:10	7:50 AM
40	An Intangible Asset Management Proposal based on ISO 55001 and ISO 30401 for Knowledge Management	Vicente González-Prida*, Antonio Guillén, Carlos Parra, Eduardo Cándón Fernández, Pablo Martínez-Galán Fernández	Spain (UTC +2)	8:10 - 8:30	1:10 PM
70	The transition of management and access to information in a manufacturing company of medium size through ISO 55001 requirements and Industry 4.0 machines acquisition	Ana Carolina Gandini Panegossi*, Ethel Cristina Chiari da Silva	Brazil (UTC -3)	8:30 - 8:50	8:30 AM

Paper Session - MA3 (Category A)					
Date: Monday 16 Aug (Bonito, Brazil)			Time: 7:30 - 9:00 am (Brasilia Time UTC -3)		
Chairs: Robin Platfoot & Turuna Seecharan					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasilia's Time	Presenter's Local Time
9	The Journey towards Successful Application of Maintenance 4.0 and Service Management 4.0	Mirka Kans*	Sweden (UTC +2)	7:30 - 7:50	3:30 PM
57	Influence of the EAMS Master Data on Implementing Maintenance Strategy	Robin Platfoot*	Australia (UTC +10)	7:50 - 8:10	8:50 PM
22	Fault diagnosis and isolation for diesel engine combustion chambers based on Autoencoder and BP neural network	Yonghua Yu, Jia Hu*, Jianguo Yang	China (UTC +8)	8:10 - 8:30	7:10 PM
19	System for Early Detection of Insulation Failures of Electric Machinery	Bruno Reno Gama*, Wilson Cesar Sant'Ana, Luiz Silva, Erik Bonaldi, Germano Lambert-Torres, Camila Paes Salomon, Isac Antonio dos Santos Areias, Daniel Almeida Arantes, Fernanda Vilas Boas, Fabio Monteiro Steiner, Rafael Bartholomeu Bernardo Carvalho	Brazil (UTC -3)	8:30 - 8:50	8:30 AM

KEYNOTE 1					
Date: Monday 16 Aug (Bonito, Brazil)			Time: 9:00 - 10:30 am (Brasilia Time UTC -3)		
Moderator: Joe Mathew					
Id	Title	Presenter	Country	Brasilia's Time	Presenter's Local Time
K1	Challenges with infrastructure to support Covid-19 vaccination roll-out	Luiz H Mandetta	Brazil (UTC -4)	9:00 - 10:30	8:00 - 9:30 AM

PANEL SESSION					
Date: Monday 16 Aug (Bonito, Brazil)			Time: 10:30 - 11:15 am (Brasilia Time UTC -3)		
Coordinators: Joao Pinto & Joe Amadi-Echendu					
Id	Title	Presenters	Country	Brasilia's Time	Presenter's Local Time
Panel 1	Research Trends in Asset Management	Ruben Barros Godoy - UFMS Luigi Galotto Junior - UFMS Moacyr A. Gomes de Brito - UFMS	Brazil (UTC -4)	10:30 - 11:15	9:30 - 10:15 AM

WORKSHOP SESSIONS					
Date: Monday 16 Aug (Bonito, Brazil)			Time: 12:00 - 13:30 pm (Brasilia Time UTC -3)		
Coordinators: Belle Upadhyaya & Ype Wijnia					
Id	Title	Author	Country	Brasilia's Time	Presenter's Local Time
MW1	Decision-Making Tools for PV Inverter Maintenance in Solar Power Plants	Huai Wang	Denmark (UTC +2)	12:00 - 13:30	5:00 - 6:30 PM
MW2	Motion Amplification and Machine Condition Monitoring	Dan Nower	USA (UTC -4)	12:00 - 13:30	11:00 - 12:30 AM

ISEAM Awards					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 7:00 - 7:30 am (Brasilia Time UTC -3)		
Moderator: <a href="#">Joe Amadi-Echendu</a> & <a href="#">Joe Mathew</a>					
	Award	Presenter	Country	Brasilia's Time	Awardee's Local Time
	ISEAM Lifetime Achievement	Joe Mathew	Australia (UTC +10)	7:00 - 7:15	6:00 - 6:15 AM
	ISEAM Achievement	Joe Amadi-Echendu	South Africa (UTC +2)	7:15 - 7:30	7:15 - 7:30 AM

Paper Session - TA1 (Category A)					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 7:30 - 9:00 am (Brasilia Time UTC -3)		
Chairs: <a href="#">Lin Ma</a> & <a href="#">Michael Cholette</a>					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasilia's Time	Presenter's Local Time
61	Condition-Based Inspection Grouping Policy for Boiler Heat Exchanger Tubes	Huy Truong-Ba*, Michael Cholette, Lin Ma, Geoff Kent	Australia (UTC +10)	7:30 - 7:50	8:30 PM
66	Railway track geometry degradation modelling and prediction for maintenance decision support	Sinda Rebello*, Michael Cholette, Huy Truong-Ba, Venkat Reddy, Alan Rosser, Tina Watkin	Australia (UTC +10)	7:50 - 8:10	8:50 PM
36	Proposition of a generic decision framework for prescriptive maintenance decision-making: An application to the automotive sector	Pedro Dias Longhitano*, Khaoula Tidriri, Christophe Berenguer, Benjamin Echard	France (UTC +2)	8:10 - 8:30	1:10 PM
15	Revisiting agricultural technologies in the 4IR era	Anthea Amadi-Echendu*, Nonceba Tyatyantsi	South Africa (UTC +2)	8:30 - 8:50	1:30 PM

Paper Session - TA2 (Category A)					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 7:30 - 9:00 am (Brasilia Time UTC -3)		
Chairs: <a href="#">Jouko Laitinen</a> & <a href="#">Ype Wijnia</a>					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasilia's Time	Presenter's Local Time
65	Developing a lubrication oil age prediction model	Najat Mohammad Nazari*, Masdi Muhammad	Malasia (UTC +8)	7:30 - 7:50	6:30 PM
58	The Effect of Knowledge Based Feature Extraction on Failure Detection of Control Surface Failures of Fighter Aircraft	Tauno Toikka, Jouko Laitinen*, Kari Koskinen	Finland (UTC +3)	7:50 - 8:10	1:50 PM
20	Model proposal for failure detection and classification of internal combustion engine operating condition	Fernanda V. Boas, Frederico O. Assunção, Luiz E. Borges da Silva, Erik Bonaldi, Levy Oliveira, Germano Lambert-Torres, Sandro F. de Souza, Danilo de Souza Lima, Josué da Costa Lacerda, Bruno R. Gama, Claudio Inacio A. Costa*, Helcio F. Villa-Nova	Brazil (UTC -3)	8:10 - 8:30	8:10 AM
50	A strategic asset management framework for improving transport infrastructure: analysis for Belgian land transport modes	Laura Molinari*, Elvira Haezendonck, Manuel Hensmans	Belgium (UTC +2)	8:30 - 8:50	1:30 PM

Paper Session - TA3 (Category A)					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 7:30 - 9:00 am (Brasília Time UTC -3)		
Chairs: <a href="#">Nuno Almeida</a> & <a href="#">Adolfo Crespo</a>					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasília's Time	Presenter's Local Time
41	Overview for Leasing or Buying Decisions in Industrial Asset Management	Vicente González-Prida*, Carlos Parra, Fredy Kristjanpoller, Pablo Viveros, Antonio Guillén, Adolfo Crespo	Spain (UTC +2)	7:30 - 7:50	12:30 PM
82	Machine learning based prediction of fatigue events in railway rails	Vincent Laurent*, Olivier Vo Van, Mathilde Mougeot, Jean-Michel Ghidaglia	France (UTC +2)	7:50 - 8:10	12:50 PM
94	Simulation-Based Automation for Consistent Asset Management Decisions: Pilot-test Application for Assessing Urban Resilience	Seyed Rezvan*, Nuno Almeida, Maria João Falcão Silva, Marta Duarte	Portugal (UTC +1)	8:10 - 8:30	12:10 PM
97	Exploring the use of Power BI dashboards to support asset management planning decisions	Pedro Costa, Jaime Silva, Lígia Ramos*, Nuno Almeida, Ana Camanho	Portugal (UTC +1)	8:30 - 8:50	12:30 PM

KEYNOTE 2					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 9:00 - 10:30 am (Brasília Time UTC -3)		
Moderator: <a href="#">Joe Amadi-Echendu</a>					
Id	Title	Presenter	Country	Brasília's Time	Presenter's Local Time
K2	Managing Airport Infrastructure during Covid-19	Kofi Smith	USA (UTC -4)	9:00 - 10:30	8:00 - 9:30 AM

Paper Session - TB1 (Category A)					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 10:30 - 12:00 am (Brasília Time UTC -3)		
Chairs: <a href="#">Mirka Kans</a> & <a href="#">Ype Wijnia</a>					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasília's Time	Presenter's Local Time
7	Exploring the relationship between maintenance and sustainability - a literature review	Ramsey Jardim*, Mirka Kans	Sweden (UTC +2)	10:30 - 10:50	3:30 PM
87	Benchmarking Asset Information Quality of a Utility Company in Brazil	Bruno Pinto Vieira, Marco Antônio Calijorne Soares, Fernando Parreiras*, José Ricardo Gonçalves, Bárbara Guimarães Penna	Brazil (UTC -3)	10:50 - 11:10	10:50 AM
8	Assessing the economic and environmental effects of gravel recycling during gravel road maintenance	Nea Svensson, Mirka Kans*	Sweden (UTC +2)	11:10 - 11:30	4:10 PM
88	Asset Information Management Systems: Critical Success Factors in the Brazilian Electricity Sector	Alexsandro Teixeira Gomes*, Fernando Parreiras	Brazil (UTC -3)	11:30 - 11:50	11:30 AM

Paper Session - TB2 (Category A)					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 10:30 - 12:00 am (Brasilia Time UTC -3)		
Chairs: Joao Pinto & Raymundo Cordero					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasilia's Time	Presenter's Local Time
2	Aligning Asset Management with the UN Sustainable Development Goals for the Government of Bangladesh and helping to build resilience in Bangladesh	Caroline Elms*, Peter Scuderi, Kaitlin Shilling, Nahila Rahman	Australia (UTC +10)	10:30 - 10:50	8:30 PM
31	Facilitating change towards predictive maintenance	Martine Van den Boomen*, Marc Botermans, Thijs De Weerd, Andreas Burzel	Netherlands (UTC +2)	10:50 - 11:10	3:50 PM
79	Application of Frequency Division Multiplexing and Neural Networks in the Operation and Diagnosis of the Stator Current and Shaft Position Sensors used in Electric/Hybrid Vehicles	Raymundo Cordero*, Thyago Estrabis, Polynne Modesto, Joao Pinto	Brazil (UTC -4)	11:10 - 11:30	10:10 AM
80	Modelling the effect of maintenance-induced failures from periodic testing of safety-critical equipment in the oil and gas industry	Jon Selvik*, Hans Petter Lohne	Norway (UTC +2)	11:30 - 11:50	4:30 PM

Session - TB3 (Industry Presentations - Category C)					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 10:30 - 12:00 am (Brasilia Time UTC -3)		
Chairs: Turuna Seecharan					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasilia's Time	Presenter's Local Time
35	Sustainable Energy System Asset Management: Modelling to support Decision Making	Andrew Kilmartin*	UK (UTC +1)	10:30 - 10:50	2:30 PM
46	Repair and Protection for Bearings and Gears by using Silicon-based Additive Technology	Stefan Bill, E. Michael Konig*	Brazil (UTC -3)	10:50 - 11:10	10:50 AM
60	Mobile Technology for Maintenance and Improvement of Asset Management in Bolivia-Brazil Gas Pipeline	Rogério Orlandeli Sanches*	Brazil (UTC -4)	11:10 - 11:30	10:10 AM
86	Using Digital Twin for Asset Integrity Management - A Subsea Equipment Use Case	Otavio Correa, Jorge Luiz Seleme Mariano	Brazil (UTC -3)	11:30 - 11:50	11:30 AM

WORKSHOP SESSIONS					
Date: Tuesday 17 Aug (Bonito, Brazil)			Time: 12:00 - 13:30 pm (Brasilia Time UTC -3)		
Coordinators: Belle Upadhyaya & Joao Pinto					
Id	Title	Author	Country	Brasilia's Time	Presenter's Local Time
TW1	On Climate Change Sustainability and Infrastructure Asset Management	David Hood	Australia (UTC +10)	12:00 - 13:30	1:00 - 2:30 AM (Wednesday 18th)
TW2	Reliability Excellence, including performance metric and case studies	Ron Moore	USA (UTC -4)	12:00 - 13:30	11:00 - 12:30 AM



<b>Best Paper Awards &amp; 16th WCEAM Announcement</b>					
<b>Date: Wednesday 18th Aug (Bonito, Brazil)</b>			<b>Time: 7:00 - 7:30 am (Brasilia Time UTC -3)</b>		
<b>Moderator: Belle Upadhyaya &amp; Adolfo Crespo</b>					
	<b>Event</b>	<b>Presenter</b>	<b>Country</b>	<b>Brasilia's Time</b>	<b>Presenter's Local Time</b>
	Best Paper awards	Belle Upadhyaya	USA (UTC -4)	7:00 - 7:15	6:00 - 6:15 AM
	16th WCEAM announcement	Adolfo Crespo	Spain (UTC +2)	7:15 - 7:30	12:15 - 12:30 PM

<b>Paper Session - WA1 (Category A)</b>					
<b>Date: Wednesday 18th Aug (Bonito, Brazil)</b>			<b>Time: 7:30 - 9:00 am (Brasilia Time UTC -3)</b>		
<b>Chairs: Kerry Brown &amp; Raymundo Cordero</b>					
<b>Paper Id</b>	<b>Paper Title</b>	<b>Authors (Presenter*)</b>	<b>Country</b>	<b>Brasilia's Time</b>	<b>Presenter's Local Time</b>
72	The Value of Business Process Management to Understand Complex Asset Management Processes	Kanika Goel, Michael Cholette*, Moe T Wynn, Lutfiye Manli, Lara Meyers	Australia (UTC +10)	7:30 - 7:50	8:30 PM
6	Towards evidence-based decision making in asset management	Helena Kortelainen*, Antti Rantala, Toni Ahonen, Jesse Tervo	Finland (UTC +3)	7:50 - 8:10	1:50 PM
17	How to build an optimal long-term asset renewals and modernization plan driven by quantified cost/risk/performance value.	John Woodhouse*, Saulo Trento, Peter Jay	UK (UTC +1)	8:10 - 8:30	12:10 PM
96	Speed of Innovation Diffusion in Green Hydrogen Technologies	Lourenço Correia*, Oliver Schwabe, Nuno Almeida	Portugal (UTC +1)	8:30 - 8:50	12:30 PM

<b>Paper Session - WA2 (Category A)</b>					
<b>Date: Wednesday 18th Aug (Bonito, Brazil)</b>			<b>Time: 7:30 - 9:00 am (Brasilia Time UTC -3)</b>		
<b>Chairs: Helena Kortelainen &amp; Joao Pinto</b>					
<b>Paper Id</b>	<b>Paper Title</b>	<b>Authors (Presenter*)</b>	<b>Country</b>	<b>Brasilia's Time</b>	<b>Presenter's Local Time</b>
92	A Sensor-Less Daylight Harvesting Approach Using Calibration to Reduce Energy Consumption in Buildings	Brenden Harris*, Juan Montes	Australia (UTC +10)	7:30 - 7:50	8:30 PM
52	Turnaround Maintenance in Process Industry: Challenges and Potential Solutions	Antti Rantala*, Helena Kortelainen, Toni Ahonen	Finland (UTC +3)	7:50 - 8:10	1:50 PM
42	Resilience rating system for buildings against natural hazards	Marta Duarte*, Nuno Almeida, Maria João Falcão Silva, Seyed MHS Rezvani	Portugal (UTC +1)	8:10 - 8:30	12:10 PM
78	Developing Asset Operations and Maintenance Strategy to deal with Impact of COVID-19	Ibifuro Ihemegbulem*, David Baglee	UK (UTC +1)	8:30 - 8:50	12:30 PM

Paper Session - WA3 (Category A)					
Date: Wednesday 18th Aug (Bonito, Brazil)			Time: 7:30 - 9:00 am (Brasília Time UTC -3)		
Chairs: <a href="#">Jeremy Novak</a> & <a href="#">Marcio Kimpara</a>					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasília's Time	Presenter's Local Time
68	Creating value and business benefits from joint offerings of asset performance management tools in the capital-intensive industries	Minna Räikkönen*, Leila Saari, Katri Valkokari, Antti Rantala, Helena Kortelainen	Finland (UTC +3)	7:30 - 7:50	1:30 PM
93	Framework for the use of Blockchain to support the development of Asset Information Models	Mohammad Darabseh*, João Poças Martins	Portugal (UTC +1)	7:50 - 8:10	11:50 AM
95	Digital twins in asset management: potential application use cases in rail and road infrastructures	João Vieira*, João Clara, hugo patricio, Nuno Almeida, João Poças Martins	Portugal (UTC +1)	8:10 - 8:30	12:10 PM
98	The potential for digital twin applications in railway infrastructure management	Christiaan Doubell*, Karel Kruger, Anton Basson, Pieter Conradie	South Africa (UTC +2)	8:30 - 8:50	1:30 PM

KEYNOTE 3					
Date: Wednesday 18th Aug (Bonito, Brazil)			Time: 9:00 - 10:30 am (Brasília Time UTC -3)		
Moderator: <a href="#">Joao Pinto</a>					
Id	Title	Presenter	Country	Brasília's Time	Presenter's Local Time
K3	Asset Control, Monitoring & Diagnostics in Industry 4.0	Mario Campos	Brazil (UTC -3)	9:00 - 10:30	9:00 - 10:30 AM

Paper Session - WB1 (Category A)					
Date: Wednesday 18th Aug (Bonito, Brazil)			Time: 10:30 - 12:00 am (Brasília Time UTC -3)		
Chairs: <a href="#">Damjan Maletic</a> & <a href="#">Ype Wijnia</a>					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasília's Time	Presenter's Local Time
11	Case study critique of ISO 5500x-based auditing and certification	Joe Amadi-Echendu*, Kolomane Khoarai, Mapule Lebata	South Africa (UTC +2)	10:30 - 10:50	3:30 PM
14	Continuous quality improvement and business performance: The mediating role of physical asset management	Damjan Maletič*, Basim Al-Najjar, Matjaž Maletič, Boštjan Gomišček	Slovenia (UTC +2)	10:50 - 11:10	3:50 PM
12	Condition Assessment of Engineered Assets in era of Society 5.0	Joe Amadi-Echendu*, George Bottholo, Keaton Raman	South Africa (UTC +2)	11:10 - 11:30	4:10 PM
16	Pragmatic performance management	Ype Wijnia*	Netherlands (UTC +2)	11:30 - 11:50	4:30 PM



Paper Session - WB2 (Category A)					
Date: Wednesday 18th Aug (Bonito, Brazil)			Time: 10:30 - 12:00 am (Brasília Time UTC -3)		
Chairs: Joao Pinto & Jouko Laitinen					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasília's Time	Presenter's Local Time
59	Failure detection and isolation by LSTM autoencoder	Tauno Toikka, Jouko Laitinen*, Kari Koskinen	Finland (UTC +3)	10:30 - 10:50	4:30 PM
75	Efficient Implementation of Artificial Neural Networks for Sensor Data Analysis based on a Genetic Algorithm	Andre Estefani, Raymundo Cordero*, Joao Pinto	Brazil (UTC -4)	10:50 - 11:10	9:50 AM
91	Machine Learning Approach for Asset Information Integration	José Ricardo Gonçalves, Bruno Pinto Vieira, Marco Antônio Calijorne Soares, Fernando Parreiras*	Brazil (UTC -3)	11:10 - 11:30	11:10 AM
84	Online Temperature Estimation of Permanent Magnet Synchronous Machines (PMSM) Using Non-linear Autoregressive Neural Networks with Exogenous Input (NARX)	Thainara de Araújo, Renan Aryel Fernandes da Silva*, Marcio L M Kimpara, Joao Pinto	Brazil (UTC -4)	11:30 - 11:50	10:30 AM

Paper Session - WC1 (Category A)					
Date: Wednesday 18th Aug (Bonito, Brazil)			Time: 12:00 - 13:30 pm (Brasília Time UTC -3)		
Chairs: Turuna Seecharan & Georges Abdul-Nour					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasília's Time	Presenter's Local Time
26	Asset Management and Energy Efficiency Improvements in a Critical Environment - The Case of a University Bioterium	Pedro Barandier*, António João Marques Cardoso	Portugal (UTC +1)	12:00 - 12:20	4:00 PM
44	A framework for gamification to encourage environmentally friendly driving habits.	Turuna Seecharan*	USA (UTC -5)	12:20 - 12:40	10:20 AM
3	Methodology for optimizing preventive maintenance programs for equipment on an electrical distribution network	Gabrielle Biard*, Georges Abdul-Nour, Raynald Vaillancourt, Karim Brunet-Benkhoucha	Canada (UTC -4)	12:40 - 13:00	11:40 AM
34	Comparison of Static and Dynamic Traffic Assignment Models in Evaluation of Disruptive Precipitation Impacts on Surface Transportation	Raif Camara Bezerra Bucar*, Yeganeh Mashayekh Hayeri	USA (UTC -4)	13:00 - 13:20	12:00 PM

Paper Session - WC2 (Category A)					
Date: Wednesday 18th Aug (Bonito, Brazil)			Time: 12:00 - 13:30 pm (Brasília Time UTC -3)		
Chairs: Dragan Kolmjenovic & Raymundo Cordero					
Paper Id	Paper Title	Authors (Presenter*)	Country	Brasília's Time	Presenter's Local Time
48	Water hammer interaction between Hydraulic Power Generator and Hydraulic Passages	Sorin-Ioan Lupa*, Georges Abdul-Nour, Martin Gagnon	Canada (UTC -4)	12:00 - 12:20	11:00 AM
54	Probabilistic technico-economic analysis of hydroelectric power unit operation and maintenance including prognostic	Michel Blain*	Canada (UTC -4)	12:20 - 12:40	11:20 AM
55	Particulate matter monitoring in Joinville, Santa Catarina, Brazil	Marianna Gonçalves*, Emílio Mercuri	Brazil (UTC -4)	12:40 - 13:00	11:40 AM
45	Determination of Water Content in Heavy Fuel Oil Using a Relative Permittivity Meter	Daniel Arantes, Mateus Campos, Luiz Silva, Wilson Sant'Ana, Carlos Teixeira*, Germano Lambert-Torres, Erik Bonaldi, Levy Oliveira, Germando Costa	Brazil (UTC -3)	13:00 - 13:20	1:00 PM

Closing Ceremony					
Date: Wednesday 18th Aug (Bonito, Brazil)			Time: 1:30 - 2:00 pm (Brasilia Time UTC -3)		
Moderator: <a href="#">Belle Upadhyaya</a>					
	Event	Speaker	Country	Brasilia's Time	Speaker's Local Time
	ISEAM goodbye	Joe Amadi-Echendu	South Africa (UTC +2)	1:30 - 1:45	6:30 - 6:45 PM
	Brazilian goodbye	Joao Pinto	Brazil (UTC -4)	1:45 - 2:00	12:45 - 1:00 PM

**IMPORTANT:**

- 1) Be aware that the conference program is stated in Brasília Time Zone (UTC -3)
- 2) Please, kindly check if the time we have considered in the program as your local time is correct. If not, you must be prepared to present/attend observing that the conference program is based on UTC -3 Time Zone.