

28th Annual Georgia Tech Fault and Disturbance Analysis Conference April 13-14, 2026

Monday, April 13, 2026	
8:00 AM	Registration
8:30 AM	Conference Opening - Welcoming Remarks A.P. Sakis Meliopoulos, Professor, School of Electrical and Computer Engineering, Georgia Tech Grace Piercy, Tennessee Valley Authority, Chair, Transient Recorder Users Council
Morning Session - Session Chair: Shane Haveron, Session Vice-Chair: Ethan Mueller	
8:40 AM	Data Acquisition, Monitoring, Calibration, P&C Health and Event Analysis in Digital Substations Sakis Meliopoulos & George Cokkinides, Georgia Institute of Technology
9:20 AM	The Effect of Fault Impedance Angle on Fault Location Robert Orndorff, Kyle Thomas & Ana Ospina, Elevate Energy Consulting Amir Makki & Maria Rothweiler, SoftStuf, Inc.
10:00 AM	Break
10:20 AM	Field Case Analysis of Protection Schemes Applied to Transmission Lines Connecting Inverter-Based Resources to the Grid Ricardo Abboud, Fabio Lollo & Paulo Lima, Schweitzer Engineering Laboratories, Inc. Marcelo Bini, EDF Renewables
11:00 AM	Analysis of 115kV line differential protection trip after the shunt capacitor bank energization Song Ji, Steven Gingras & Matthew White, National Grid USA
11:40 AM	Best Paper Award, Recognitions
11:50 AM	Lunch - On Your Own
Afternoon Session - Session Chair: Angelo Tempone, Session Vice-Chair: Greg Bradley	
12:50 PM	NERC Update - Rich Bauer, NERC
1:30 PM	A Survey of Fault Studies with a Large IOT Power Quality Sensor Network Theo Laughner, Lifescale Analytics James Anderson, Joe McNulty & Bob Marshall, Whisker Labs
2:10 PM	Break
2:25 PM	Vegetation Contacts with Medium-Voltage Conductors: Summary of Field Experiments Jeffrey Wischkaemper, B. Don Russell, Carl Benner & Karthick Manivannan, Texas A&M University
3:05 PM	Event Analysis of Inverter Mis-Operations of Distributed Energy Resources Zoraz Azam, Stephen Guenther, Ethan Lupinek, Joao Martins, TJ Purcell, Micah Till, Dominion Energy
3:45 PM	Break
3:55 PM	Islanding Detection Scheme on the Trinidad and Tobago Electric Grid using Synchrophasors Parasnath Singh, Trinidad and Tobago Electricity Commission
4:35 PM	Display and Discussion of Actual Fault Records Brought by Participants Moderator: Ethan Mueller
5:00 PM	Adjourn
5:00 - 9:00 PM	Vendor Exhibits Open

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Tuesday, April 14, 2026	
Morning Session - Session Chair: Eli Wallace, Session Vice-Chair: Tony Ranson	
8:00 AM	The Phantom Tertiary Menace Brendan Preece, Daniel Marinelli & Alec Kumpf, Southern Company Services P&C Applications
8:40 AM	Inverter-Based Resource Penetration: How Much is Too Much? An Attempt to Answer the Question of What Constitutes High Penetration of IBR Resources Abel Gonzales, Dhanabal Mani, Volney Naranjo, Megger
9:20 AM	Real-Time Fault Detection in HVDC Lines Using Traveling Waves: Experimental Comparison of Wavelet Transform and Differentiator-Smoother Filter Arhad Ismail, Basharat Hussain Shah, Shipra Tiwari, Flavio Bezerra Costa, Wayne Weaver, Michigan Technological University, Adrian W.D. Sarmiento, University of Campinas, Sakis Meliopoulos, Georgia Institute of Technology
10:00 AM	Break
10:20 AM	Data Sources for AI Analysis Applications in IEC 61850 Based Digital Substations Alexander Apostolov, Omicron Electronics
11:00 AM	Fault Location Based on Traveling Waves for Offshore Submarine Cables Connecting Wind Energy Conversion Systems Adrian W.D. Sarmiento, Jaimis S. L. Colqui, Jose Pissolato, University of Campinas, Flavio Bezerra Costa, Michigan Technological University
11:40 AM	Lunch - On Your Own
Afternoon Session - Session Chair: Grace Piercy, Session Vice-Chair: Song Ji	
12:40 PM	An interesting overreach mis-operation and the process of solving mis-operations Paul Hodges, Tampa Electric Company
1:20 PM	Experimental Investigation of Traveling Wave-Based Fault Detection and Location in Short AC Lines Stephen Nagi, Arhad Ismail, Basharat Hussain Shah, Shipra Tiwari, Flavio Bezerra Costa, Michigan Technological University, Adrian W.D. Sarmiento, University of Campinas
2:00 PM	Circuit Breaker Life Monitoring: A Tutorial Mike Kockott, Sergiu Paduraru, Andreas Schibli, Hitachi Energy
2:40 PM	Break
3:00 PM	A New Wavelet Transform Approach for High-Impedance Fault Detection under Inverter-Based Resource Conditions Gaurav Amrutrao Pail, Arhad Ismail, Basharat Hussain Shah, Shipra Tiwari, Flavio Bezerra Costa, Michigan Technological University, Adrian W.D. Sarmiento, University of Campinas
3:40 PM	Feature-Based PMU Event Classification under Variable PMU Participation and Overlapping Events Reza Nematirad, Zheyuan Cheng & Farrokh Aminifar, Quanta Technology
4:20 PM	FLISR Application for the Protection of Distribution Systems with High Penetration of IBRs Alexander Apostolov, OMICRON Electronics
5:00 PM	Closing Remarks - Adjourn
5:00 - 9:00 PM	Vendor Exhibits Open

Alternate Papers & Coordinators - Chair: Luis Collazo, Vice-Chair: Doug Dunay	
	Stealing VARs in Broad Daylight: Inverter-Based Solar Challenges on the Distribution Grid Sherif Salem , , Eversource Energy, Bob McFetridge , Beckwith Electric
	Experimental Assessment of Transformer Impact on Traveling-Wave Fault Signals in AC Lines Basharat Hussain Shah , Arshad Ismail , Shipra Tiwari , Flavio Bezerra Costa , Michigan Technological University, Adrian W. D Sarmiento , University of Campinas
	Investigation of Protection Failure in a 5.7 MW, 13.8 kV Induction Motor During an Arc Fault Caused by a Phase Opening Near the Neutral Connection Alam Menezes , Petrobras
	Recommended Practices for Applying ROCOF in Islanding Detection Jinlei Xing , Schneider Electric
	Single Phase Open Protection for DER Michael Ruppert , Jem Engineering, Craig Holt , Sargent & Lundy