

23rd Annual Georgia Tech Fault and Disturbance Analysis Conference

Mon-Tue, April 26-27, 2021

(This Is A Virtual Conference Using The Hopin Online Events Platform)

[Online Registration \(https://pe.gatech.edu/courses/fault-and-disturbance-analysis-conference\)](https://pe.gatech.edu/courses/fault-and-disturbance-analysis-conference)

(Registration Ends on Thursday, April 22, 2021)

Monday, April 26, 2021 - All Times are Eastern Daylight Time	
8:00 AM	Attendees Begin Entering Hopin Stage (Speakers Will Enter Back Stage) Link With Login Instructions Will Be Emailed to Registrants 24 Hours Prior To Conference Start
8:30 AM	Conference Opening - Welcoming Remarks A.P. Sakis Meliopoulos Professor, School of Electrical and Computer Engineering, Georgia Tech Anthony Murphy Tennessee Valley Authority Chair, Transient Recorder Users Council
Morning Session - Session Chair: Lori Hartzog, Session Vice-Chair: Al Ward	
8:40 AM	Power Quality Standards Development within the IEEE Power & Energy Society Dan Sabin , Schneider Electric, Matt Norwalk , Southern California Edison, Kevin Kittredge , Electrotek Concepts, Steven Johnston , Eaton
9:20 AM	Fault Analysis and the Fourier Transform Explained Amir Makki , Maria Rotweiler , Softstuf; Robert Orndorff , Dominion Energy
10:00 AM	Break
10:20 AM	Functional Testing of Disturbance Recording Systems in Digital Substations Alexander Apostolov , OMICRON Energy
11:00 AM	Time in Substation Protection and Control Systems: Principles and Applications Alexander Apostolov , OMICRON Energy
11:40 AM	Best Paper Award, Recognitions
11:50 AM	Lunch - On Your Own
Afternoon Session - Session Chair: Greg Bradley, Session Vice-Chair: Tony Ranson	
12:50 PM	NERC Update Rich Bauer , NERC
1:30 PM	DFR Configuration Control: Solutions for Optimized Performance and Compliance Phillip Crittenden , Anthony Murphy , Tennessee Valley Authority; Christoph Lackner , Grid Protection Alliance
2:10 PM	Break
2:30 PM	A National Infrastructure for Artificial Intelligence on the Grid Theo Laughner , PowerGRID-RX, Inc.; Sean Murphy , PingThings, Inc.
3:10 PM	Display and Discussion of Actual Fault Records Brought by Participants Moderator: Robert Orndorff
3:50 PM	Break
4:00 PM	User Forum Moderator: Kyle Thomas
5:00 PM	Adjourn

Tuesday, April 27, 2021 - All Times are Eastern Daylight Time	
Morning Session - Session Chair: Irene Lu, Session Vice-Chair: Jon Goodson	
8:00 AM	Benefits of Integrating DFR and PQ Data with an Asset Information Model that Includes Mapping to Planning Models, SCADA Historians, GIS Databases, and Asset Management Systems Stephen Wills, Christoph Lackner, Russell Robertson , Grid Protection Alliance; Anthony Murphy , Tennessee Valley Authority
8:40 AM	Short Circuit Model Data Requirements and Improvements for an Automated Fault Location Xinyang Dong, Juergen Holbach , Quanta Technology, LLC, Robbie James , Pacific Gas & Electric
9:20 AM	GTC Fault Trace Tool Theo Laughner , PowerGRID-RX, Inc.; Marlin Browning, Lori Hartzog, Joey Lowery ; Georgia Transmission Corporation
10:00 AM	Break
10:20 AM	Use of DFR and PQ Data for Automated Restrike and Trip Coil Energization Analysis Christoph Lackner, William Ernest , Grid Protection Alliance; Anthony Murphy , Tennessee Valley Authority
11:00 AM	Automatic Assessment of Electrical Load Impact due to Voltage Sags Dan Sabin, Jon Bickel , Schneider Electric
11:40 AM	Lunch - On Your Own
Afternoon Session - Session Chair: Doug Dunay, Session Vice-Chair: Angelo Tempone	
12:40 PM	Evaluation of Electrical Degradation in High Voltage Circuit Breaker Monitoring Nicola Gariboldi , Qualitrol Corporation, LLC; Phillip Corliss , PMC-Consulting, LLC
1:20 PM	A Most Unusual Event Analysis Frank Stacom , Stacom Engineering Company Ed McGann , Vermont Electric Power Company
2:00 PM	Analysis of the Unexpected Operations at a 345kV National Grid Substation Associated with Capacitor Bank Switching-off Operation Song Ji, Yujie (Irene) Lu , National Grid
2:40 PM	Break
3:00 PM	Event Investigation of 69 kV Double-Circuit Faults Amanvir Sudan , Schweitzer Engineering Laboratories, Inc. Ahsan Mirza, Christopher Bolton, Girolamo Rosselli, Sergio Flores , San Diego Gas & Electric
3:40 PM	Using High-Resolution Oscillography to Improve the Performance of Controlled Switching for Transformers Brett Hampson, Ritwik Chowdhury , Schweitzer Engineering Laboratories, Inc. Vetti Bala , Genesis Energy
4:20 PM	Analysis of a Transformer Differential Relay Over-trip on an External Fault at National Grid Yujie (Irene) Lu, Song Ji , National Grid
5:00 PM	Closing Remarks - Adjourn

Alternate Papers - Chair: Danny Aramouni, Vice-Chair: Robert Orndorff	
Field Experience With Open-Phase Testing at Sites With Inverter-Based Resources Brett Cockerham, John Town, Ritwik Chowdhury , Schweitzer Engineering Laboratories, Inc.; James Gahan , Cypress Creek Renewables; Ariel Valdez , Dominion Energy	
Experiences with Wind and Solar Plant Modeling and Validation for Bulk Power Systems Interconnection Studies Sarina Adhikari, David Mueller, Bob Zavadil , Enernex	