

# 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>)**

**(Registration Ends on Thursday, April 22, 2021)**

Monday, April 26, 2021 - All Times are Eastern Daylight Time	
08:00 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
08:30 AM	<b>Conference Opening - Welcoming Remarks</b> <b>A.P. Sakis Meliopoulos</b> Professor, School of Electrical and Computer Engineering, Georgia Tech <b>Anthony Murphy</b> Tennessee Valley Authority Chair, Transient Recorder Users Council
<b>Morning Session - Session Chair: Lori Hartzog, Session Vice-Chair: Al Ward</b>	
08:40 AM	<b>Power Quality Standards Development within the IEEE Power &amp; Energy Society</b> <b>Dan Sabin</b> , Schneider Electric, <b>Matt Norwalk</b> , Southern California Edison, <b>Kevin Kittredge</b> , Electrotek Concepts, <b>Steven Johnston</b> , Eaton
09:20 AM	<b>Fault Analysis and the Fourier Transform Explained</b> <b>Amir Makki</b> , <b>Maria Rotweiler</b> , Softstuf; <b>Robert Orndorff</b> , Dominion Energy
10:00 AM	<b>Break</b>
10:20 AM	<b>Functional Testing of Disturbance Recording Systems in Digital Substations</b> <b>Alexander Apostolov</b> , OMICRON Energy
11:00 AM	<b>Time in Substation Protection and Control Systems: Principles and Applications</b> <b>Alexander Apostolov</b> , OMICRON Energy
11:40 AM	<b>Best Paper Award, Recognitions</b>
11:50 AM	<b>Lunch</b> - On Your Own
<b>Afternoon Session - Session Chair: Greg Bradley, Session Vice-Chair: Tony Ranson</b>	
12:50 PM	<b>NERC Update</b> <b>Rich Bauer</b> , NERC
01:30 PM	<b>DFR Configuration Control: Solutions for Optimized Performance and Compliance</b> <b>Phillip Crittenden</b> , <b>Anthony Murphy</b> , Tennessee Valley Authority; <b>Christoph Lackner</b> , Grid Protection Alliance
02:10 PM	<b>Break</b>
02:30 PM	<b>A National Infrastructure for Artificial Intelligence on the Grid</b> <b>Theo Laughner</b> , LifeScale Analytics; <b>Sean Murphy</b> , PingThings, Inc.
03:10 PM	<b>Display and Discussion of Actual Fault Records Brought by Participants</b> <b>Moderator: Robert Orndorff</b>
03:50 PM	<b>Break</b>
04:00 PM	<b>User Forum</b> <b>Moderator: Kyle Thomas</b>
05:00 PM	<b>Adjourn</b>

<b>Tuesday, April 27, 2021 - All Times are Eastern Daylight Time</b>	
<b>Morning Session - Session Chair: Irene Lu, Session Vice-Chair: Jon Goodson</b>	
08:00 AM	<b>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</b> Stephen Wills, Christoph Lackner, Russell Robertson, Grid Protection Alliance; Anthony Murphy, Tennessee Valley Authority
08:40 AM	<b>Short Circuit Model Data Requirements and Improvements for an Automated Fault Location</b> Xinyang Dong, Juergen Holbach, Quanta Technology, LLC, Robbie James, Pacific Gas & Electric
09:20 AM	<b>GTC Fault Trace Tool</b> Theo Laughner, LifeScale Analytics; Marlin Browning, Lori Hartzog, Joey Lowery; Georgia Transmission Corporation
10:00 AM	<b>Break</b>
10:20 AM	<b>Use of DFR and PQ Data for Automated Restrike and Trip Coil Energization Analysis</b> Christoph Lackner, William Ernest, Grid Protection Alliance; Anthony Murphy, Tennessee Valley Authority
11:00 AM	<b>Automatic Assessment of Electrical Load Impact due to Voltage Sags</b> Dan Sabin, Jon Bickel, Schneider Electric
11:40 AM	<b>Lunch - On Your Own</b>
<b>Afternoon Session - Session Chair: Doug Dunay, Session Vice-Chair: Angelo Tempone</b>	
12:40 PM	<b>Evaluation of Electrical Degradation in High Voltage Circuit Breaker Monitoring</b> Nicola Gariboldi, Qualitrol Corporation, LLC; Phillip Corliss, PMC-Consulting, LLC
01:20 PM	<b>A Most Unusual Event Analysis</b> Frank Stacom, Stacom Engineering Company Ed McGann, Vermont Electric Power Company
02:00 PM	<b>Analysis of the Unexpected Operations at a 345kV National Grid Substation Associated with Capacitor Bank Switching-off Operation</b> Song Ji, Yujie (Irene) Lu, National Grid
02:40 PM	<b>Break</b>
03:00 PM	<b>Event Investigation of 69 kV Double-Circuit Faults</b> Amanvir Sudan, Schweitzer Engineering Laboratories, Inc. Ahsan Mirza, Christopher Bolton, Girolamo Rosselli, Sergio Flores, San Diego Gas & Electric
03:40 PM	<b>Using High-Resolution Oscillography to Improve the Performance of Controlled Switching for Transformers</b> Brett Hampson, Ritwik Chowdhury, Schweitzer Engineering Laboratories, Inc. Vetti Bala, Genesis Energy
04:20 PM	<b>Analysis of a Transformer Differential Relay Over-trip on an External Fault at National Grid</b> Yujie (Irene) Lu, Song Ji, National Grid
05:00 PM	<b>Closing Remarks - Adjourn</b>
<b>Alternate Papers - Chair: Danny Aramouni, Vice-Chair: Robert Orndorff</b>	
<b>Field Experience With Open-Phase Testing at Sites With Inverter-Based Resources</b> John Town, Brett Cockerham, Ritwik Chowdhury, Schweitzer Engineering Laboratories, Inc.; James Gahan, Cypress Creek Renewables; Ariel Valdez, Dominion Energy	
<b>Experiences with Wind and Solar Plant Modeling and Validation for Bulk Power Systems Interconnection Studies</b> Sarina Adhikari, David Mueller, Bob Zavadil, Enernex	