

# Registration Information



## FOUR EASY WAYS TO REGISTER

After you register you will be sent a confirmation letter with detailed instructions.

**ONLINE:** [www.pe.gatech.edu](http://www.pe.gatech.edu) **FAX:** 404-894-8925

**MAIL:** Georgia Institute of Technology, Professional Education — R  
P.O. Box 93686, Atlanta, Georgia 30377-0686

**PHONE:** 404-385-3500 between 9a.m. and 4 p.m., Eastern time.

## Cancellations and Refunds

Cancellations must be received in writing (e-mail, fax, or mail) 10 or more business days prior to a course start date for a full refund. If canceled less than 10 business days prior to a course start date, no refund will be issued.

Students may request a transfer to another course of equal or lesser value. This request must be received in writing (e-mail, fax, or mail) 10 or more business days prior to the original course start date. A transfer will not be granted if the student request is received less than 10 business days prior to the original course start date.

Substitutions may be made with written approval from the original registrant.

Georgia Institute of Technology reserves the right to cancel a course for any reason, including insufficient enrollment. If a course is canceled, all registration fees will be refunded or can be transferred to another course.

## Continuing Education Units

This program meets criteria for the nationally accepted Continuing Education Unit. Each participant completing the program will earn 1.4 CEUs. A certificate of completion, showing the accumulated CEUs earned, can be requested by e-mailing [ceu-request@dlpe.gatech.edu](mailto:ceu-request@dlpe.gatech.edu).

## Hospitality Suites

You are encouraged to visit the hospitality suites, after 5 p.m. on Sunday, Monday, and Tuesday, April 29, 30, and May 1 at the Renaissance Atlanta Hotel Downtown.

## Course Location and Accommodations

This program will be held at the Georgia Tech Global Learning Center located at 84 Fifth St. N.W., Atlanta (intersection of Fifth and Spring streets). Visit the Georgia Tech Global Learning Center at [www.gatechcenter.com](http://www.gatechcenter.com). Hotel accommodations are available at the Renaissance Atlanta Hotel Downtown, located at 590 W. Peachtree St. N.W., Atlanta. The phone number is 404-881-6000.

To receive the Georgia Tech room rate, be sure to indicate you are attending a Georgia Tech program.

Participants may wish to take the Metro Atlanta Rapid Transit Authority, or MARTA, from the airport to the hotel. MARTA costs \$1.75 one way. Ground Transportation at the airport is located adjacent to the baggage claim area. Board any train (all trains are northbound). Exit at the North Avenue Station and follow signs to West Peachtree Street. Proceed one block south on West Peachtree to the hotel. For additional lodging options, visit the Georgia Tech Professional Education Web site at [www.pe.gatech.edu](http://www.pe.gatech.edu).

**EE-190 10th Annual Fault and Disturbance Analysis Conference (x43-21C)**

April 30-May 1, 2007 | Atlanta | Course Fee: **\$230**

**OR BOTH EE-190 10th Annual Fault and Disturbance Analysis Conference (x43-21C) and EE-115 61th Annual Protective Relaying Conference (x43-22C)**

May 2-4, 2007 | Atlanta | Course Fee: **\$460**

Please remit payment no later than 10 days prior to the course start date. Advance payment is required to guarantee your place in the course.

Legal Name: \_\_\_\_\_

Preferred Name: \_\_\_\_\_

Birthdate: \_\_\_\_/\_\_\_\_/\_\_\_\_

Last 4 Digits of Social Security Number (for identification purposes only): \_\_\_\_\_

Position: \_\_\_\_\_ Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_

Business/Home Phone#: \_\_\_\_\_ FAX #: \_\_\_\_\_ E-mail: \_\_\_\_\_

Payment Enclosed \$ \_\_\_\_\_

Check enclosed (make check or money order payable to Georgia Tech)  Purchase Order enclosed

Charge:  American Express  VISA  MasterCard  Discover

Card#: \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Cardholder's Name: \_\_\_\_\_

Signature: \_\_\_\_\_



Examine Recent Electrical Distruptions and Possible Solutions

POWER SYSTEM CONFERENCES

# 10th Annual Georgia Tech Fault and Disturbance Analysis Conference

April 30-May 1, 2007 • Atlanta

For more information on this course and others visit [www.dlpe.gatech.edu/elec/courses](http://www.dlpe.gatech.edu/elec/courses)

Distance Learning and Professional Education

Georgia Institute of Technology

P.O. Box 93686

Atlanta, GA 30377-0686

Earn Your Power System Certificate! *See inside for details*

# Conference Outline

## Monday, April 30, 2007

- 8 Registration  
Georgia Tech Global Learning Center
- 8:30 Conference Opening  
Welcoming Remarks  
**A.P. Sakis Meliopoulos**  
Professor, School of Electrical and Computer Engineering  
**Dean Ellis**  
Chairman, Transient Recorder Users Council, Web site: <http://www.truc.org/>

### Morning Session

- Chairman: **Alexander Apostolov**  
Company: OMICRON Electronics
- 8:40 **Analysis of Misoperations of System Protection Schemes in the Nordic Grid 2nd of December 2005**  
**Jan Age Walseth**, Stanett SF, Region Northern Norway
- 9:20 **Common Power Quality Waveform Signatures Using IEEE COMTRADE and PQDIF**  
**David Mueller, Thomas Grebe**, Electrotek Concepts Inc.
- 10:00 BREAK
- 10:20 **An Automated Fault Location System as a Decision Support Tool for System Operators**  
**Ravindranauth Ramlachan, John Vasco, Jade M. Wong**, Consolidated Edison of NYC  
**Lee Wang**, Grid Sentinel Inc.
- 11 **Large Scale Power Quality Monitoring Systems Based on Wavelet Technique Using Disturbance Recorders**  
**Mohamed A. El-Hadidy, Dalal H. Mostafa**, Egyptian Electricity Transmission Co.

### LUNCH

### Afternoon Session

- Chairman: **Jim Hackett**  
Company: Mehta Tech
- 12:40 **NERC Update**  
**Bob Cummings**, NERC
- 1:25 **Application of Phasor Measurements Units for Disturbance Recording**  
**Rich Hunt, Mark Adamiak**, GE Multilin
- 2:05 BREAK

## Power System Certificate Program

The Georgia Tech Power System Certificate Program offers a series of comprehensive short courses covering all major aspects of power system modeling design, control, and operation, taught by experts in the field. To complete the certificate, candidates are required to take a total of 12 days of instruction, of which at least six days must be selected from core courses. Both core courses and electives are offered once a year (approximately at the same time each year), and properly spaced to facilitate achievement of the certificate. Anyone who wishes to take individual courses without pursuing a certificate is welcome to do so. For more information or questions, contact Professor A. P. Sakis Meliopoulos at 404-894-2926 or [sakis.meliopoulos@ece.gatech.edu](mailto:sakis.meliopoulos@ece.gatech.edu).

### Core Courses

Integrated Grounding System Design and Testing  
Grounding, Harmonics, & Electromagnetic Influence Design Practices  
Power Distribution System Grounding and Transients  
Power System Relaying: Theory and Application  
Modern Energy Management Systems

### Elective Courses

Fault and Disturbance Analysis Conference  
Georgia Tech Protective Relaying Conference

For more information about these courses, call Georgia Tech Professional Education at 404-385-3500.

### Course Dates

March 27-30, 2007  
May 15-17, 2007  
Sept. 25-27, 2007  
Oct. 22-25, 2007  
Nov. 13-15, 2007

### Course Dates

April 30-May 1, 2007  
May 2-4, 2007

# Conference Outline

- 2:20 **A Series of Unfortunate Events: Fault Disturbance Analysis of 345KV Line Terminal Bus Insulator Failures on Northeast Utilities Transmission System**  
**Dominick Fontana**, Northeast Utilities
- 3 **Display and Discussion of Actual Fault Records Brought by Participants**  
Moderator: **Robert Orndorff**, Dominion Virginia Power
- 3:40 BREAK
- 3:50 **User Forum**  
Moderator: **Sherry Goiffon**, TXU Electric Delivery
- 5 ADJOURN

## Tuesday, May 1

### Morning Session

- Chairman: **Tony Napikoski**  
Company: United Illuminating
- 8 **High Accuracy Fault Location Algorithm with Distributed Parameters and Evaluation Using Actual Fault Data**  
**Hideyuki Takani**, TOSHIBA Corp.
- 8:35 **Fault Analysis of CADAPE 400 kV Transmission Line Operation Using Digital Fault Recorder Analysis Software Tools**  
**Luis Perdomo**, Empresa CADAPE
- 9:10 **Software Tools for Record Fault Analysis in Power Systems**  
**Hugo Davila**, NxtPhase T&D Corp.
- 9:45 BREAK
- 10:05 **Triggered Small Scale Disturbance Recorded Over Wide Area Serves To Validate System Modeling**  
**Dudley Maki**, Minnesota Power Corp.  
**John M. Lane**, NxtPhase T&D Corp.
- 10:40 **Application of the Super Calibrator as a Distributed State Estimator – Experience in Actual Systems**  
**A. P. Meliopoulos, G. J. Cokkinides**, Georgia Institute of Technology  
**Floyd Galvan**, Entergy Services, Inc.  
**Bruce Fardanesh**, NYPA  
**Paul Myrda**, TRC
- 11:15 **Timing Options and Tradeoffs for Fault Analysis and Wide Area Measurements Systems – Timing is Everything**  
**Roy Moxley, Ken Fodero**, Schweitzer Engineering Laboratories Inc.
- 11:50 LUNCH

### Afternoon Session

- Chairman: **Dean Ellis**  
Company: New York ISO Inc.
- 12:50 **Integration of Substation IED Data**  
**T. Popovic**, Test Laboratories International Inc.  
**M. Kezunovic**, Texas A&M University  
**Don Sevcik**, Robert Lunsford, CenterPoint Energy
- 1:25 **Requirements for Large-Scale Wide Area Monitoring, Protection And Control Systems**  
**Yi Hu**, KEMA  
**Vahid Madani**, PG&E  
**Rui Moraes**, ONS – Brasil Electric System Operator  
**Damir Novosel**, InfraSource
- 2 **Timing Considerations for Event Reconstruction**  
**Jim Ingleson**, NYISO
- 2:35 BREAK
- 2:50 **A Report by the Working Group on Considerations of Disturbance Recorders to the IEEE Power System Relay Committee**  
**William Strang**
- 3:25 **Event Localization Techniques for Real-Time Visualization of Eastern Interconnect Frequency Disturbances**  
**Deirdre Alphenaar, Kevin Zhong, Walter Jones**, Genscape Inc.
- 4 **Future of Monitoring Systems using Network Computing Terminals For Power Systems**  
**Takehiko Tsuchiya, Takaya Shono, Yoshinori Takei, Katsuhiko Sekiguchi**, Toshiba
- 4:35 ADJOURN

# 2007 Planning Committee Roster

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