

# ECE Distinguished Speaker Series

## SYNCHRONIZED PHASOR MEASUREMENT DATA AND THEIR APPLICATIONS IN POWER SYSTEMS

FRIDAY JANUARY 15, 2016

11:00 AM – HEC 101

The talk will present some research conducted at RPI on the use of synchronized phasor measurements to improve the reliable operation of power systems. The discussion will start with an introduction to phasor measurements. Then several research topics will be discussed:

1. Phasor data management using low rank matrices and matrix completion algorithms
2. Phasor-only state estimation across power control regions
3. Disturbance propagation
4. Wide-area control accounting for data latency

Some of these endeavors are multi-disciplinary in nature and are the results of collaboration with control and signal processing researchers.

**DR. JOE H. CHOW**  
Rensselaer Polytechnic Institute



Joe Chow received his MS and PhD degrees from the University of Illinois, Urbana-Champaign. After working in the General Electric power system business in Schenectady, he joined Rensselaer Polytechnic Institute in 1987. He is a professor of Electrical, Computer, and Systems Engineering and the RPI Campus Director of the CURENT ERC. His research interests include power system dynamics and control, synchronized phasor data, voltage stability, and control of renewable resources. He is a fellow of IEEE and a past recipient of the IEEE PES Charles Concordia Power System Engineering Award.

*Hosted by: Dr. Zhihua Qu*

