Information Hierarchy for Heterogeneous Smart Grid

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PSERC Public Webinar
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[Note: The white paper and slides associated with this webinar will be posted on the PSERC website at www.pserc.org in advance of the webinar. The archived webinar will be available immediately following the live webinar.]

Description

The electric grid in the United States has evolved over the past century from a series of small independent community-based systems to one of the largest and most complex cyber-physical systems today. The established conditions that made the electric grid an engineering marvel are being challenged by major changes, the most important being the social economic incentive to reduce carbon emissions, a greater utilization of renewable energy, and the need to increase consumer participation.

This talk discusses aspects of the computation and information architectures of a future smart grid that is potentially highly dynamic, heterogeneous, and interactive. We discuss some of the fundamental issues on the information gathering, fusion, and decision architectures that exploit the available and timely information.

This webinar is based on one of nine white papers in the project “The Future Grid to Enable Sustainable Energy Systems: An Initiative of the Power Systems Engineering Research Center” funded by the U.S. Department of Energy. More information about the Future Grid Initiative is available on the PSERC website.

Biography: Lang Tong is the Irwin and Joan Jacobs Professor in Engineering at Cornell University. He received the B.E. degree from Tsinghua University, Beijing, P.R. China, and PhD degree in EE from the University of Notre Dame, Notre Dame. He was a Postdoctoral Research Affiliate at the Information Systems Laboratory, Stanford University. His research is in the general area of statistical inference, commu-
communications, and complex networks. His current research focuses on energy and power systems. He received the 2004 Best Paper Award from the IEEE Signal Processing Society, the 2004 Leonard G. Abraham Prize Paper Award from the IEEE Communications Society, and the 1993 Outstanding Young Author Award from the IEEE Circuits and Systems Society. He is also a coauthor of seven student paper awards including two IEEE Signal Processing Society Young Author Best Paper Awards. He is a Fellow of IEEE.

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**Registration for Webinar Participation:** None required. There is no charge for participating!

**Participation by Webinar:** We will be using the Adobe Connect 8 webinar platform. You will be able to watch the presentation slides on your computer from the designated site http://asu.adobeconnect.com/pserc/ and listen to the webinar through your computer’s speakers or headphones. Click here for the connection details and instructions for testing your connection. If you cannot hear the presenter, check to make sure your speaker is not muted in Adobe Connect. Access is limited. However, the webinar will be archived so it can be watched later. You can also get the audio over the public phone bridge at 712-432-0800 (passcode: 937250#).

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