

# GlobalSIP 2013

IEEE Global Conference on Signal and Information Processing

## Emerging Challenges in Network Sensing, Inference, and Communication

[www.ieeeglobalsip.org/sym/13/ECNSIC](http://www.ieeeglobalsip.org/sym/13/ECNSIC)

December 3-5, 2013 • Austin, Texas, U.S.A.

### Call for Papers

#### Organizing Committee

##### General Chair

Robert Calderbank  
*Duke University*

##### Technical Chair

Rebecca Willett  
*Duke University*

This symposium is focused on the fundamental challenges of network sensing, inference, and communication in the context of real-world network problems spanning multiple disciplines, including computer, biological, and social networks. In each of these application settings, scientists face a myriad of trade-offs related to efficient sampling, accurate inference in the presence of noise or missing data, principled incorporation of sparsity models, flexible and computable models of prior knowledge about network topology, and energy management. Despite these common challenges, however, the type of network considered has a substantial impact on how these challenges manifest and how they can be addressed. This symposium will be highly cross-disciplinary, and focused on (a) connecting researchers across different fields who are facing similar network inference challenges and (b) introducing signal processing researchers to specific network inference challenges arising in a variety of settings.

Topics of interest include:

- Sparsity in network sensing, inference, and communication
- Network structure inference from noisy observations
- Network inference in the presence of missing data
- Efficient sensing of network data
- Energy management in networks
- Complex network topology
- Dynamics of networks
- Flows on networks
- Applications in communication networks
- Applications in biological networks
- Applications in social networks

#### Paper Submission

Paper submission will be online only through the GlobalSIP 2013 website. Papers should be in IEEE two-column format and no longer than 4 pages.

#### Symposia Website

Full details, new updates, and submission instructions can be found on the symposia website, <http://www.ieeeglobalsip.org/sym/13/ECNSIC>

#### Important Dates

Paper Submission Deadline	June 15, 2013
Review Results Announce	July 30, 2013
Camera-Ready Papers Due	September 7, 2013

