

# 2010 IEEE International Symposium on Network Coding (NetCod 2010)

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## Call for Papers

In today's practical communication networks such as the Internet, information delivery is accomplished through routing. In routing, network nodes simply store and forward data. Network coding is a generalization of routing in which nodes can generate output data by encoding (i.e., computing certain functions of) previously received input data. Thus, network coding allows information to be "mixed" at a node. As shown by the pioneering work of Ahlswede, Cai, Li, and Yeung in 2000, network coding can increase the network throughput beyond what was previously thought possible.

Looking forward, the synergistic development of theory and practice of network coding shall provide the driving force for continuing the advances in each side at an unprecedented pace, toward a fundamental understanding and practical developments of significant impact. The 2010 IEEE International Symposium on Network Coding (NetCod 2010) aims to provide a forum for an in-depth coverage of the research developments of network coding up to date. NetCod 2010 will continue the tradition established by the International Workshop on Network Coding since 2005, and focus on emerging topics, controversial ideas, and future research directions in the area of network coding research. Late-breaking research results from both theoretical and practical perspectives are encouraged. NetCod 2010 will be held in a setting that simulates lively discussions among participants.

The topics of interest include, but are not limited to:

- Shannon theory for network coding
- Network code constructions and algorithms
- Joint source coding and network coding
- Joint channel coding and network coding
- Resource optimization for network coding
- Robustness, energy, or delay aspects of network coding
- Security for network coding
- Network error correction
- Multi-session network coding
- Applications of network coding
  - Network Coding for Internet Communications
  - Network coding for Wireless Networks
  - Network Coding for Distributed Storage
- Network coding systems

Submitted papers must be original and should not be currently under review for any other publication. Authors of accepted papers will need to sign an IEEE copyright release form and present their paper at NetCod 2010. The Proceedings of NetCod 2010 will be published by the IEEE Information Theory Society and distributed at the symposium, and will also be included in the IEEE Xplore Digital Library.

All paper submissions will be handled electronically in the NetCod 2010 submission web site. Authors should prepare a Portable Document Format (PDF) version of their manuscripts for submission. Papers must be no longer than 6 pages, in font size no smaller than 10 points, and using the standard IEEE style for conference papers. For example, if LaTeX is used to prepare papers, IEEEtran.cls should be used as the standard template.

### **Important Dates**

Paper submissions due: January 18, 2010, 23:59 EST

Notification of acceptance: March 12, 2010

Camera-ready papers due: April 9, 2010