



CALL FOR PAPERS

SYMPOSIUM ON SELECTED AREAS IN COMMUNICATIONS

DATA STORAGE TRACK

Track Chair

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Scope and Topics of Interest

Signal processing and coding are key components of modern data storage systems. Therefore, codes and signal processing methods need to be tailor-designed to address issues that are unique to data storage systems. Recent technological developments in massive distributed storage networks, data centers, and cloud storage systems, as well as the emergence of new memory and data storage techniques, pose new challenges to the design of signal processing, coding, and security methods. The Data Storage Track will present an opportunity for researchers and engineers in this community to present novel and practical approaches and results related to all aspects of data storage in, but not limited to, the following areas:

- Detection, e.g., sequence detection, partial response and decision feedback for data storage systems
- Equalization and filtering for data storage systems
- Timing and gain recovery for data storage systems
- Write pre-compensation and write equalization
- Channel characterization for new recording media and memory technologies, including modeling of media noise and non-linearity
- Code design, coding bounds, density, and channel capacity in data storage systems
- Modulation and run-length limited codes
- Decoding approaches for data storage systems
- Fault tolerance and coding techniques for disk arrays and data centers
- Network coding techniques for distributed storage systems
- Data compression for digital storage, including audio and video
- Data security for digital storage systems
- New memory and data storage technologies, e.g., NAND Flash, Phase Change Memory, PRAM, Heat-Assisted Magnetic Recording
- MRAM, STT-MRAM, RRAM, and memristor based memories
- New concepts for cloud-storage systems, data centers, and massive distributed storage networks.

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline of **15 March 2013** for publication in the IEEE Globecom 2013 Conference Proceedings and for presentation at the conference. Submissions will be accepted through [EDAS](#). All submissions must be written in English and be at most six (6) printed pages in length, including figures. For full details, please visit the following website:

<http://www.ieee-globecom.org/2013/submguide.html>