

The First International Workshop on Full Duplex Wireless Communications

In conjunction with IEEE GLOBECOM 2016, 4-8 December 2016, Washington, DC USA

Workshop Chairs

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Plenary Speakers

TBD

Technical Program Committee

Batu Krishna Chalise, Villanova University
Yingbo Hua, University of California, Riverside
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Important Dates

Paper Submissions: 15 July 2016
Acceptance Notification: 1 September 2016
Registration Deadline: 8 September 2016
Camera-ready Papers: 1 October 2016
Workshop: 8 December 2016

Call For Papers

With the explosive growth of wireless communications, frequency resources become more and more scarce, which dramatically increases the mobile service providers' cost to acquire new frequency bands. Therefore, how to efficiently utilize frequency resources becomes one of the most important challenges in the design of next generation wireless communication systems. Full duplex (FD), which allows a transceiver to simultaneously transmit and receive signals at the same frequency band by employing advanced technologies on antenna, circuit, and signal processing, has been recognized as a promising technique to potentially double the spectrum efficiency of point-to-point wireless communication systems. Recently, both academic and industrial efforts have been paid to develop FD test beds for typical wireless communication systems, such as WiFi, relay, LTE, and cable access systems.

Although FD techniques have been shown to be powerful, there are still many technical challenges and untouched issues in this field, such as self-interference (SI) cancellation, simplified realization, link capacity, network level throughput, and protocol design. We organize this workshop to discuss various FD techniques with colleagues in the related fields and hope to accelerate technological development of FD systems.

This workshop will mainly focus on, but not limited to, the following topics:

- Antenna design for self-interference(SI) cancellation
- Radio frequency SI cancellation techniques
- Digital SI cancellation techniques
- Information theoretical fundamentals of full-duplex(FD) wireless communications
- Precoding for FD multiple-antenna systems with imperfect SI cancellation
- Full duplex relaying strategies
- Physical layer network security in the full-duplex systems
- Energy efficient design of FD communication systems
- Frequency reuse and cognitive transmission with FD radios
- Full duplex wireless-powered communications
- Throughput analysis for FD cellular/ad hoc networks
- FD MAC layer protocol design and analysis
- Routing protocol for FD networks
- Hybrid full/half duplex system analysis
- Flexible duplex schemes
- Demo and experimental results for FD systems

Paper Submission Link

<https://edas.info/N22570>

Workshop Website

full-duplex.sustc.edu.cn

The authors should follow the IEEE guidelines that apply to all GLOBECOM submissions when preparing their contributions (maximum paper length: 6 pages with 10-pt font).