



**NSF I/UCRC Center for Fiber Wireless Integration and Networking  
(FiWIN) for Heterogeneous Mobile Data Communications**

**Industrial Advisory Board Meeting,**

**May 3-4, 2018**

**Georgia Institute of Technology**

**Room 1010, Centergy One, 75 5<sup>th</sup> Street NW, Atlanta, GA 30308**

**[Please visit fiwin.org](http://fiwin.org) for registration**

**Wednesday, May 2, 2018**

- 6:15 pm Please go directly to **Bytes Restaurant** or meet at the entrance of Centergy ONE, Tech Square, 75 5<sup>th</sup> Street NW, Atlanta
- 6:30 pm Dinner Reception at **Bytes Restaurant**,  
848 Spring St. NW, Atlanta, 30308  
  
([parking available at Centergy Deck, Abercrombie Place, Tech Square](#). Please contact Raquel Plaskett for the parking stamp)

**Thursday, May 3, 2018, Centergy #1010**

Centergy Conference Room 1010, Centergy ONE,  
75 Fifth Street, NW Atlanta, GA 30308

- 7:45 am Participant Registration
- 7:45 - 8:15 am Breakfast and Networking
- 8:20 - 8:30 am Welcome Remarks:  
Susan Shows, Senior VP, Georgia Research Alliance,  
Zvi Galil, Dean, College of Computing, Georgia Tech  
M-A Weitnauer, Senior Asso. Chair, Electrical & Computer Engineering
- 8:30 - 9:00 am Vision and center status report:  
Center Director, G.-K. Chang, Georgia Tech
- 9:00 - 9:30 am NSF Presentation: Dmitri Perkins, I/UCRC Program Director  
LIFE Forms Evaluation: Stephen McGregor, Assessment Coordinator
- 9:30 – 9:45 am BREAK**
- 9:45 – 12:15 pm Research Results Presentation Session I:**
- 9:45 -10:10 am GS 16-1 "Asynchronous Multiuser Low-Latency Fiber-Wireless  
Transmission System for 5G Mobile Data Networks",  
Hyunwoo Cho
- 10:10 -10:35 am GF 16-1 "High-Capacity Digital RoF System for Beyond-CPRI  
Mobile Fronthaul with Statistics Based DSP for Data Compression,"  
Mu Xu



- 10:35 -11:00 am GS 17-1, "All-spectra Wireless Access Enabled by Fiber-Wireless Cells with Function Decoupling," Rui Zhang
- 11:00 -11:25 am GS 17-2, "Artificial Neural Network Based Machine Learning Techniques for Mitigating Non-Linear Channel Impairments in Fiber Wireless Access Systems," Siming Liu
- 11:25-11:50 am GF 17-1, "5G over Advanced Fixed Wireless Networks," Zoe Shen
- 11:55 am –12:55 pm LUNCH at TSRB Bldg, Room 130, Ground Floor  
85 5<sup>th</sup> Street, Tech Square**
- 1:00 – 1:50 pm Research Results Presentation Session II:  
Centergy Room 1010, 10<sup>th</sup> floor, 75 Fifth Street, Atlanta**
- 1:00-1:25 pm GF 17-2, "Service Oriented Flexible Function Split for Next Generation Mobile Fronthaul Architectures," Yahya Alfadhli
- 1:25-1:50 pm GF 17-3, "Precision Indoor Positioning System with Machine Learning for 5G Mobile Data Communications," Dicky Hsu
- 1:50 - 2:50 pm New Project Proposals:**
- 1:50 – 2:10 pm PS 18-1, "Orthogonal Chirp Division Multiplexing: An Advanced Multi-carrier System for Delivering Heterogeneous 5G Services," Hyunwoo Cho, M. Shameer Omar
- 2:10 – 2:30 pm PS 18-2, "Adaptive Optimization of Extreme Broadband Mobile Fronthaul using Machine Learning Techniques," Qi Zhou
- 2:30 – 2:50 pm PS 18-3, PS 18-3: "Multipoint to Multipoint Fiber-Wireless Access Systems supporting Network Slicing," Shuang Yao
- 2:50-3:10 pm PS 18-4, "Fog Computing for Low-latency 5G Applications," Enrique Saurez, Gupta Harshit
- 3:10 -3:20 pm BREAK**
- 3:20 - 3:55 pm Detailed Center Review and Discussions with Directors on projects, proposals, and funding plan  
(Members, Center Director, Assessment Coordinator and NSF manager)
- 3:55 - 5:15 pm Industry Advisory Board (IAB) Closed Meeting  
(Members and NSF only)  
Discussions of
- Impressions of Day 1
  - Day 2 project/proposal review and voting process
  - Project management & mentoring framework for selected projects
  - Member Pulse Survey/Benefits Inventory
- 5:15 - 6:30 pm Poster Session, Networking and Refreshments**  
Room 5126, 5<sup>th</sup> floor, Centergy ONE, 75 Fifth Street, NW Atlanta  
Room 5112. Breakout Room



## Friday, May 4, 2018

	Room 1010, 10 <sup>th</sup> floor, Centergy ONE, 75 Fifth Street, NW Atlanta (with Room 5112 as the Breakout Room)
7:30 - 8:00 am	Arrival and Breakfast
8:00 - 9:00 am	LIFE Form Review and Discussion (All participants)
9:00 - 10:30 am	IAB Closed Meeting Room 1010, (Members and NSF only) Discussion of proposed projects, voting and discussion of results, formulation of funding recommendation to center leadership. Finalize discussion of topics started at the Day 1 formative IAB meeting.
10:30 - 10:40 am	BREAK
10:40 - 11:40 am	IAB Report Out, Discussion, Action Items and Dates for Next Semiannual Meeting (Members, Center Directors and NSF)
11:40 – 12:00 pm	Summary and Closing Remarks: Center Directors, G.-K. Chang (GT), Shiwen Mao (Auburn)
12:00 noon	<b>ADJOURN (Box Lunches)</b>

### **Hotel Recommendations: It's graduation week at Georgia Tech.**

**Please reserve your room early!**

**(1) AC Hotel by Marriott, Downtown, Atlanta (1 mile)**

101 Andrew Young Intl Blvd NW  
Atlanta, Georgia 30303

**(2) Hotel Indigo, Atlanta, Midtown (within 6 blocks)**

683 Peachtree St. SE Atlanta, GA 30308

**(3) Atlanta Midtown Hilton Garden Inn (within 3 blocks)**

97 Tenth St, Atlanta, GA 30309

**(4) Hyatt Atlanta Midtown Hotel (within 3 blocks)**

125 Tenth St, Atlanta, GA 30309

**(5) The Georgian Terrance Hotel (within 8 blocks)**

659 Peachtree Street, NE, Atlanta, GA 3030

**(6) Homewood Suites by Hilton (3 blocks)**

97 Tenth street NW, Atlanta GA 30309

**(7) Renaissance Atlanta Midtown Hotel (within 1 block)**

866 West Peachtree St NW Atlanta, GA 30308  
(800) 291-9434

**(8) Georgia Tech Hotel and Conference Center**

800 Spring Street NW, Atlanta, GA 30354