



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

**Industrial Advisory Board Meeting,**

**May 16-17, 2019**

**Wednesday, May 15, 2019**

- 6:15 pm Please meet at the entrance of Centergy ONE,  
Tech Square, 75 5th Street NW, Atlanta
- 6:30 pm Dinner reception at **Bytes Restaurant**  
848 Spring St NW Suite A, Atlanta, GA 30308 (near Tech Square)

**Thursday, May 16, 2019,**

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

- 7:45 am Participant Registration
- 7:45 - 8:15 am Breakfast and Networking
- 8:15 - 8:30 am Welcome Remarks:  
Dr. Chauoki Abdallah, Executive VP of Research, Georgia Tech  
Dr. Magnus Egerstedt, Chair, School of Electrical and Computer  
Engineering, Georgia Tech
- 8:30 – 8:50 am Vision of the Center and status report:  
G.-K. Chang, Georgia Tech and Shiwen Mao, Auburn University
- 8:50 – 9:20 am FiWIN IAB members profile and introduction, 15 minutes each  
(1) Hugo Wagner, Director, Airbus  
(2) Charles Su, CTO, Jabil/AOC technologies
- 9:20 - 9:40 am LIFE Forms Evaluation: Denis Gray, Assessment Coordinator
- 9:40 – 9:50 am Coffee Break**
- 9:50 –11:50 am Research results of 5G Fiber-Wireless Networking projects:**
- 9:50 -10:10 am GS 17-1, “All-spectra Wireless Access Enabled by Fiber-Wireless  
Cells with Function Decoupling,” Rui Zhang
- 10:10 -10:30 am GF 17-1, “5G over Advanced Fixed Wireless Networks,” Zoe Shen
- 10:30 -10:50 am GF 17-2, “Service Oriented Flexible Function Split for Next  
Generation Mobile Fronthaul Architectures,” Yahya Alfadhli
- 10:50 – 11:10 am GS 18-1, “Orthogonal Chirp Division Multiplexing: An Advanced  
Multi-carrier System for Delivering Heterogeneous 5G Services,”  
Shahmeer Omar, Qi Zhou
- 11:10 – 11:30 am GS 18-2, “Network Slicing in Agile Fiber Wireless Access  
Networks,” Shuang Yao
- 11:30 – 11:50 pm GS 18-3, “Fog Computing for Low-latency 5G IoT Applications,”  
Enrique Saurez, Gupta Harshit, Kishore Ramachandran



<b>11:50–12:50 pm</b>	<b>LUNCH at Georgia Tech Hotel Restaurant in Tech Square</b>
<b>1:00 - 2:00 pm</b>	<b>Progress Report of 5G Radio Access Technologies Projects:</b>
1:00 - 1:20 pm	AF18-1 “Hybrid A/D Retrodirective Antenna Array (HARA): An Array-Agnostic High Precision Self-Steering Antenna Array Backend for 5G Communications,” Michael Bolt, Mark Adams
1:20 - 1:40 pm	GF18-2 “High speed beamformer with autonomous tracking function and wide-steering angle for reliable and dynamic 5G mobile fronthaul,” You-Wei Chen, Min-Yu Huang, Hua Wang
1:40 - 2:00 pm	AF18-3 “Pseudo Analog Video Transmission,” Ticao Zhang, S. Mao
<b>2:00 -3:20 pm</b>	<b>New Project Proposals</b>
2:00 - 2:20 pm	PS 19-1 "Controllable active metasurface arrays for agile beamsteering and massive MIMO applications," Daylon Hester
2:20- 2:40 pm	PS 19-2 “Channel adaptation and noise characterization for high performance data communication systems,” Rui Zhang
2:40 - 3:00 pm	PS 19-3 "RF-Fire-Alarm: deploying UHF RFID for fire detection," Shiwen Mao
3:00 – 3:20 pm	PS 19-4 “Proactive Interference detection and mitigation through deep reinforcement learning in 5G New Radio Networks,” Qi Zhou
<b>3:20 -3:30 pm</b>	<b>Coffee BREAK</b>
3:40 - 4:00 pm	Center Review and Discussions with Directors on projects, new proposals and funding plan (Members, Center Director, Assessment Coordinator)
-	- <i>Bylaws discussion</i>
4:00 - 5:30 pm	Industry Advisory Board Closed Meeting, (Members and NSF only) Discussions of <ul style="list-style-type: none"><li>- Impressions of Day 1</li><li>- Day 2 project/proposal review and voting process</li><li>- Project management &amp; mentoring framework for selected projects</li><li>- Member Pulse Survey</li></ul>
<b>5:30 - 7:00 pm</b>	<b>Poster Session, Networking and Refreshments</b> Room 5126, 5 <sup>th</sup> floor Centergy ONE

### **Friday, May 17, 2018, Centergy ONE, Room 1010**

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 topics started at the Day 1 formative IAB meeting.
10:30 - 10:40 am	Coffee BREAK



10:40 - 11:40 am	IAB Report Out, Discussion, Action Items and Dates for Next Semiannual Meeting (IAB Members, Center Directors and NSF)
11:40 – 12:00 pm	Summary and action items: Center Directors, G.-K. Chang (GT), Shiwen Mao (Auburn)
12:00 – 1:00 pm	Networking Lunch (Box Lunches)
<b>1:00 pm</b>	<b>Meeting Adjourned</b>

### **Hotel Recommendations:**

- 1. Georgia Tech Hotel and Conference Center**  
800 Spring Street NW, Atlanta, GA 30354  
(404) 347-9440
- 2. Renaissance Atlanta Midtown Hotel (within 1 block)**  
866 West Peachtree St NW Atlanta, GA 30308  
(800) 291-9434
- 3. AC Hotel by Marriott, Downtown, Atlanta (1 mile)**  
101 Andrew Young Intl Blvd NW, Atlanta, Georgia 30303
- 4. Hotel Indigo, Atlanta, Midtown (within 6 blocks)**  
683 Peachtree St. SE Atlanta, GA 30308
- 5. Atlanta Midtown Hilton Garden Inn (within 3 blocks)**  
97 Tenth St, Atlanta, GA 30309
- 6. Hyatt Atlanta Midtown Hotel (within 3 blocks)**  
125 Tenth St, Atlanta, GA 30309
- 7. The Georgian Terrace Hotel (within 8 blocks)**  
659 Peachtree Street, NE, Atlanta, GA 3030
- 8. Homewood Suites by Hilton (3 blocks)**  
97 Tenth street NW, Atlanta GA 30309