



# BWAC IAB MEETING

Nov. 21-22, 2019

NC State University (NCSU)  
 Talley Student Union (TSU)  
 Raleigh, NC

[bwac.arizona.edu](http://bwac.arizona.edu)

## WEDNESDAY, NOV. 20 (TSU BR-Currituck Ballroom)

TIME		TITLE
6:00 PM	8:00 PM	Welcome Reception

## THURSDAY, NOV. 21 (TSU BR-Coastal Ballroom)

TIME		TITLE	SPEAKER
7:00 AM	8:00 AM	Registration & Breakfast	
8:00 AM	8:10 AM	Opening Remarks & Meeting Logistics	Marwan Krunz, University of Arizona & Ismail Guvenc, North Carolina State University
8:10 AM	8:20 AM	Welcome Remarks from the Associate Vice Chancellor of Partnerships and Economic Development, and from the Department Chair of Electrical & Computer Eng.	Dennis Kekas & Daniel Stancil, North Carolina State University
8:20 AM	8:30 AM	Remarks from the National Science Foundation I/UCRC Program Director	Behrooz Shirazi, National Science Foundation
8:30 AM	9:00 AM	BWAC Site Updates	M. Krunz/T. Bose (UA), R. "Vish" Viswanathan (UM), J. Park (VT), H. Liu (CUA), I. Guvenc (NCSU)
9:00 AM	10:00 AM	<b>Keynote-1:</b> Bits to beams: Enabling technology for 5G base stations	Tony Montalvo, Analog Devices
10:00 AM	10:15 AM	Coffee Break	

### Session I

10:15 AM	10:20 AM	LIFE Review Process	<b>Denis Gray</b> , NSF BWAC Evaluator
10:20 AM	10:45 AM	AERPAW: Aerial Experimentation and Research Platform for Advanced Wireless	<b>Ismail Guvenc</b> , North Carolina State University
10:45 AM	11:10 AM	Adaptive Multi-lobe Analog Beamforming for Blockage-resistant 5G Millimeter-wave Communications	<b>Irmak Aykin</b> , University of Arizona
11:10 AM	11:35 AM	Impact of Wi-Fi transmissions on C-V2X performance	<b>Jerry Park</b> , Virginia Tech
11:35 AM	12:00 AM	Cognitive/Adaptive Equalization for HF Channels	<b>Noel Teku</b> , University of Arizona
12:00 AM	1:20 PM	<b>Lunch</b>	
<b>Session II</b>			
1:20 PM	1:30 PM	Metasurface Cloaks for Cloaking and Decoupling of Interleaved Phased Antenna Arrays	<b>R. "Vish" Viswanathan</b> , University of Mississippi
1:30 PM	1:55 PM	Indoor Ray Tracing and Base Station Placement Optimization for mmWave Systems	<b>Fatih Erden</b> , North Carolina State University
1:55 PM	2:20 PM	Investigation and Manufacturing of 3-D printed RF Devices	<b>Elliott Hutchcraft</b> , University of Mississippi
2:20 PM	2:45 PM	Receiver Localization in Massive MIMO Beamforming Networks	<b>Sharif H. R. Khalil</b> , Catholic University of America
2:45 PM	3:10 PM	Unsupervised mmWave Beamforming via Autoencoders	<b>Ture Peken</b> , University of Arizona
3:10 PM	3:25 PM	<b>Coffee Break</b>	
<b>Session III</b>			
3:25 PM	3:50 PM	Cooperative Relaying with Massive MIMO Beamforming and Non-Orthogonal Multiple Access	<b>Son Dinh</b> , Catholic University of America
3:50 PM	4:15 PM	Optimizing Bluetooth-BLE Scanning Systems	<b>John Daigle</b> , University of Mississippi
4:15 PM	4:40 PM	A Reinforcement Learning-based Framework for Resource Allocation and Task Assignment in Mobile Edge Computing Networks	<b>Li-Tse (Eric) Hsieh</b> , Catholic University of America
4:40 PM	6:00 PM	<b>Poster Session – TSU 3285</b>	

6:00 PM	7:30 PM	<b>Dinner and Best Poster Awards – TSU 3285</b>
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**FRIDAY, NOV. 22 (TSU 4140-Governance Chamber)**

7:30 AM	8:30 AM	<b>Breakfast</b>	
<b>Session IV</b>			
8:30 AM	9:30 AM	<b>Keynote-2:</b> Spectrum Allocation, Sharing, and Challenges for 5G and IoT Technologies	<b>Russ Gyurek, Cisco</b>
9:30 AM	10:30 AM	<b>IAB Business Meeting (<i>closed session</i>) *</b>	
10:30 AM	10:40 AM	<b>Coffee Break</b>	
10:40 AM	11:30 AM	<b>IAB Technical Input on Presented Projects (<i>closed session</i>) *</b>	
11:30 AM	12:15 PM	<b>IAB Feedback to BWAC Leadership Team (<i>closed session</i>) *</b>	
12:15 PM	1:00 PM	<b>Lunch</b>	

**\* Closed-sessions on Day 2 are limited to IAB members, Site directors and BWAC faculty.**