



BWAC IAB MEETING

March 16-17, 2023

The Catholic University of America
620 Michigan Ave., N.E.
Washington, DC 20640

Online Registration: bwac.arizona.edu

WEDNESDAY, MARCH 15

TIME		TITLE
7:00 PM	9:00 PM	Welcome Reception (Courtyard by Marriott Washington, DC/U.S. Capitol)

THURSDAY, MARCH 16 (CALDWELL AUDITORIUM, CATHOLIC UNIVERSITY)

TIME		TITLE	NAME
8:00 AM	9:00 AM	Registration & Breakfast	
9:00 AM	9:10 AM	Welcome and Meeting Logistics	Hang Liu, CUA Site Director
9:10 AM	9:25 AM	BWAC Center Updates	Marwan Krunz, UA, Center Director
9:25 AM	10:15 AM	Keynote 1: TBA	Dr. Dan Massey, OUSD (R&E) – Program Lead FutureG-5G
10:15 AM	10:25 AM	Coffee Break	
Projects Updates – Session I, Chair: Ismail Guvenc (presenters' names indicated with '*')			
TIME		TITLE	NAME
10:25 AM	10:40 AM	Spectrum Sharing and Coexistence With Passive Devices Above 100 GHz	Sopan Sarkar*, Arush Sharma, and Marwan Krunz (UA)
10:40 AM	10:55 AM	Game-Theoretic, Secure Resource Allocation for Integrated Satellite-Terrestrial Networks	Roghieh Mahdavi* and Alexandra Duel-Hallen (NCSU)
10:55 AM	11:10 AM	New Algorithms and Fundamental Limits of Machine Learning Based Decoders	Sudarshan Adiga*, Ravi Tandon, and Tamal Bose (UA)
11:10 AM	11:20 AM	Coffee Break	

Projects Updates – Session II, Chair: Hang Liu (presenter’s name indicated with ‘**’)			
11:20 AM	11:35 AM	Joint Sensing and Communication in Full Duplex mmWave MIMO Systems	Murat Bayraktar* and Nuria González Prelcic (NCSU)
11:35 AM	11:50 AM	Reinforcement Learning for Efficient Resource Allocation in Cell-Free MIMO	Noel Teku*, Tamal Bose, and Ravi Tandon (UA)
11:50 AM	12:05 PM	Stealthy Adversarial Attacks on Machine Learning Classifiers in Wireless Communications	Wenhan Zhang and Marwan Krunz* (UA)
12:05 PM	1:15 PM	Lunch	
1:15 PM	2:05 PM	Keynote 2: The role of Open RAN in the Innovation and Wireless Network Evolution	Dr. Balaji Raghothaman, Chief Technologist, Network Solutions, Keysight Technologies
2:05 PM	2:15 PM	Coffee Break	
Projects Updates – Session III, Chair: James Gigrich (presenter’s name indicated with ‘**’)			
2:15 PM	2:30 PM	Metasurface Cloaks for Reduction of Mutual Coupling in Printed and Slotted Antennas and Antenna Arrays	Shefali Pawar* and Alexander Yakovlev (UMiss)
2:30 PM	2:45 PM	Widely Tunable Receivers and Filters for Next-Generation Communications	Jacob Dean*, Cody Ellington, and Brian Floyd (NCSU)
2:45 PM	3:00 PM	Empowering Large Arrays from Electromagnetics and Optics	Shehla Amir*, Rodrigo Castellanos, and Robert W. Heath (NCSU)
3:00 PM	3:10 PM	Coffee Break	
Projects Updates – Session IV, Chair: Alexander Yakovlev (presenter’s name indicated with ‘**’)			
TIME		TITLE	NAME
3:10 PM	3:25 PM	Resilient Information Processing and Delivery at Wireless Network Edge	Vincent Cheng/Gahana Majumdar, Hang Liu, and Lin-Ching Chang (CUA)
3:25 PM	3:40 PM	Phase Prediction using Real-time Adaptive Machine Learning for Space Based Arrays	Sharif Khalil*, George Nehmetallah, Hang Liu, and Richard LaFontaine (CUA)
3:40 PM	3:55 PM	Modeling Intermodulation Distortion Generated by Reconfigurable Antennas (<i>proposed project</i>)	Jacob Adams (NCSU)
3:55 PM	5:00 PM	Poster Session & Technical Interactions	

6:00 PM	7:30 PM	Dinner and Best Poster Awards
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FRIDAY, MARCH 17 (PRYZBYLA GREAT ROOM C, CUA)

8:00 AM	9:00 AM	Breakfast	
9:00 AM	10:00 AM	Keynote 3: 5G NR Design Features Enabling Enhanced Spectrum Sharing and Coexistence	Dr. Kamran Etemad Senior Technology Advisor, FCC/Univ. of Maryland
10:00 AM	10:10 AM	Coffee Break	
10:10 AM	10:40 AM	BWAC - Future Plan (IAB members, BWAC directors, NSF Program Director, and BWAC faculty)	
10:40 AM	11:40 AM	IAB Business Meeting (closed session)	
11:40 AM	12:30 PM	IAB Technical Input on Presented Projects and Feedback to BWAC Leadership (IAB members, BWAC directors, NSF Program Director, and BWAC faculty)	
12:30 PM	1:30 PM	Box Lunch and Adjourn	