Carleton University **Systems and Computer Engineering**

Carleton UNIVERSITY

2020–2021 Carleton 6G Workshop #4

Advanced Physical Layer Technologies

Thursday, 15 April 2021, 10:00 - 15:30 EDT (Ottawa time)

Zoom Link: https://carleton-ca.zoom.us/j/97634079358

Workshop Chairs: Dr. Halim Yanikomeroglu, Carleton University (halim@sce.carleton.ca)
Program Chair: Dr. Ferdi Kara, Carleton University & Zonguldak Bulent Ecevit University

This is the fourth edition of the 2020–2021 Carleton 6G Workshops:

- Workshop #1: Faster-than-Nyquist Signaling — 27 Jul 2020
- Workshop #2: Satellite Mega-Constellations — 16 Dec 2020
- Workshop #3: AI/ML for Wireless Communications and Networks — 16 Feb 2021
- Workshop #4: Advanced Physical Layer Technologies — 15 Apr 2021
- Workshop #5: HAPS (High Altitude Platform Station) Networks — xx Jun 2021

Please feel free to forward this program to persons who may be interested.

Time	Speaker	Affiliation	Title
10:10–10:15	Dr. Halim Yanikomeroglu	Carleton University, Canada	Opening Remarks
10:15–11:00	Dr. Ertugrul Basar	Koc University, Turkey	Keynote: **Back to the Future with Reconfigurable Intelligent Surfaces**
11:00–11:20	Dr. Fatima Ezzahra Airod	INPT, Morocco	HARQ in Full-Duplex Relay-Assisted Transmissions for URLLC
11:20–11:40	Dr. Omid Abbasi	Carleton University, Canada	Transmission Structure, Detection Scheme, and Power Allocation for Uplink User Cooperation with NOMA and RSMA
11:40–12:00	Islam Abu Mahady	Lakehead University, Canada	NOMA Spectral Efficiency Maximization with Improper Gaussian Signaling and SIC Imperfection
12:00–12:30	**Q&A and Discussion**		
12:30–13:30	**Break**		
13:30–13:50	Dr. Mehmet Cagri Ilter	Aalto University, Finland	Data-Oriented View for Convolutional Coding with Adaptive Irregular Constellations
13:50–14:10	Dr. Michel Kulhandjian	University of Ottawa	NOMA Computation over Multi-Access Channels for Multimodal Sensing
14:10–14:25	**Q&A and Discussion**		
14:25–14:45	Dr. Sahabul Alam	Carleton University, Canada	Bursty Impulsive Noise Mitigation in NOMA: A MAP Receiver-based Approach
14:45–15:05	Omar Maraqa	KFUPM, Saudi Arabia	Energy-Efficient Coverage Enhancement of Indoor THz-MISO Systems: An FD-NOMA Approach
15:05–15:20	**Q&A and Discussion**		