Carleton University **Systems and Computer Engineering**

2021–2022 Carleton 6G Workshop #1

HAPS (High Altitude Platform Station) Networks

Thursday, 29 July 2021, 09:30–15:30 EDT (Ottawa | New York)

Zoom Link: https://carleton-ca.zoom.us/j/96770041932

Workshop Chair: Dr. Halim Yanikomeroglu, Carleton University
https://www.youtube.com/channel/UCE7CGxWVxDbRFJUO-inSDOA

Program Chairs: Dr. Animesh Yadav and Dr. Omid Abbasi, Carleton University

This is the first edition of the 2021–2022 Carleton 6G Workshops. The list of workshops from last year:

- 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

Please feel free to forward this program to persons who may be interested. No registration is required. Please send an email to halim@sce.carleton.ca to be included in the 6G workshops mailing list.

Time	Speaker	Affiliation	Title
09:30–09:40	Dr. Animesh Yadav and Dr. Omid Abbasi	Carleton University, Canada	Opening Remarks
09:40–10:40	Dr. Halim Yanikomeroglu	Carleton University, Canada	Keynote: 6G/B6G HAPS Networks: An Evolution with a Revolutionary Impact
10:40–11:00	**Q&A and Discussion**		
11:00–11:20	Dr. Rui Dinis	FCT, Universidade Nova Lisboa, Portugal	Quantized Digital Amplification: A Highly Efficient Amplification Scheme for HAPS
11:20–11:40	Dr. Hayssam Dahrouj	KAUST, Saudi Arabia	Cloud-Enabled High-Altitude Platforms Systems: Challenges and Opportunities
11:40–12:00	Dr. Ogbonnaya Anicho	Liverpool Hope University, UK	Multi-HAPS Network Implementation: Conflicts in Routing and Autonomy Algorithms
12:00–12:30	**Q&A and Discussion**		
12:30–13:30	**Break**		
13:30–13:50	Olfa Ben Yahia	Istanbul Technical University, Turkey	On the Use of HAPS to Increase Secrecy Performance in Satellite Networks
13:50–14:10	Safwan Alfattani	University of Ottawa, Canada	Reconfigurable Smart Surfaces for HAPS Systems
14:10–14:30	**Q&A and Discussion**		
14:30–14:50	Qiqi Ren	Carleton University, Canada; Xidian University, China	Caching and Computation Offloading in HAPS-Assisted Intelligent Transportation Systems
14:50–15:10	Dr. Omid Abbasi	Carleton University, Canada	UxNB-Enabled Cell-Free Massive MIMO with HAPS-Assisted THz Backhauling
15:10–15:30	**Q&A and Discussion**		