

2023 US-Korea Quantum Initiative 2nd Annual Review

LtCol Michael Richards | June 20-22, 2023 | Arlington, VA

Basic Research Innovation Collaboration Center (BRICC)
4100 N Fairfax Drive | Suite 450 | Arlington, VA 22203

Agenda Day 1 | Tuesday, June 20, 2023

Time	Topic	Speaker
9:00	Registration	
9:30	Welcome and Intro	Lt Col Mike Richards, Asian Office of Aerospace Research & Development
9:35	AFOSR Welcome	Col Janelle Jackson, Director of the Air Force Office of Scientific Research
9:40	NRF Welcome	MinJung Baik, Director of the Office of International Cooperation Framework
9:45	IITP Welcome	Jin-Gook Lim, Director General of Future Policy Division
9:50		Group Photo
10:20	BREAK	
10:30	Session Chair--Brian Zhou	
10:35	Nanoscale Quantum Emitters Integrated by All-fiber Optofluidics	Shuo Sun, University of Colorado Boulder
		Kyunghwan Oh, Yonsei University
11:35	LUNCH	
1:00	A metasurface-enabled high-brightness high-indistinguishability single photon source at 1.55 μm	Xingjie Ni, Pennsylvania State University
2:00	BREAK	
2:15	Interfacing Miniaturized Superconducting Resonators to Ultra-Coherent Spin Ensembles for Higher Efficiency Quantum Memories	Brian Zhou, Boston College
		Minkyung Jung, DGIST
3:15	Waveguide-coupled Interlayer Exciton Condensation LED in 2D Heterostructures for Quantum Optics Applications	Philip Kim, Harvard University
		Young-Jun Yu, Chungnam National University
4:15	Closing Comments, Adjourn	

Agenda Day 2 Wednesday, June 21, 2023		
Time	Topic	Speaker
9:00	Registration	
9:10	Session Chair--Vito Scarola	
9:15	Mechanically Modulated Microwave Circulator using Cryogenic-MEMS Switches	Sunil Bhawe, Purdue University
10:15	BREAK	
10:25	Hybrid Quantum Algorithms for Quantum Many-body Physics	Vito Scarola, Virginia Tech
		Kwon Park, Korea Institute for Advanced Study
11:30	LUNCH	
12:45	Towards a new quantum platform based on ultracold molecules9:10	Scarlett Yu (for John Doyle), Harvard University
13:45	BREAK	
14:00	TBD	

Agenda Day 3 Thursday, June 22, 2023		
Time	Topic	Speaker
9:00	Registration	
9:10	Session Chair--Michael Hamilton	
9:15	Quantum Simulation using Moiré Exciton-Polaritons	Vinod Menon (video presentation), City Univeresity of New York
10:15	BREAK	
10:30	Engineering Exceptional Points in All-On-Chip Hybrid Quantum Devices	Michael Hamilton, Auburn University
		Tae Hee Kim, Ewha Womans University
11:30	Near-infrared Quantum Emitters from Strained Moiré Excitons in van der Waals Heterostructures	SungWoo Nam, University of California, Irvine
12:30	Closing Comments, Adjourn	