Day1 “Computer and AI / Quantum Communication”

Date: November 25, 2024

Time	Presenter		Presentation Title	Notes
17:00-17:05 (JP) 09:00-09:05 (NL)	JST/NWO		Intro JST/NWO	
17:05-17:10 (JP) 09:05-09:10 (NL)	Welcome Ambassadors JP/NL			
17:10-17:30 (JP) 09:10-09:30 (NL)	Talks 1-4 Computer/AI (5 minutes each)			
	1	Manuel Baltieri (Araya Inc.)	Advancing AI and Brain Interfaces in the Age of High-Speed Computing	JP
	2	Stefano Bosco (QuTech)	Hole spin qubits for quantum computing	NL
	3	Qinyu Chen (Leiden University)	Neuromorphic Event-based Vision in Extended Reality	NL
	4	Bruno Ehrler (AMOLF)	Artificial synapses and neurons from metal halide perovskites with ultralow energy consumption	NL
17:30-17:37 (JP) 09:30-09:37 (NL)	Questions about talks 1-4 Computing/AI (7 minutes)			
17:37-17:57 (JP) 09:37-09:57 (NL)	Talks 5-8 Computing/AI (5 minutes each)			
	5	Kei Majima (National Institutes for Quantum Science and Technology)	Machine learning and AI for reading out information in the brain	JP
	6	Renaud Jolivet (Maastricht University)	Energy-efficient learning in spiking neural networks	NL
	7	Wim Korevaar (Eindhoven University of Technology)	Introducing the ICT Lab @ Technical University of Eindhoven	NL
	8	Alfons Laarman (Leiden University)	The Unreasonable Effectiveness of Automated Reasoning in Quantum Computing	NL
17:57-18:04 (JP) 09:57-10:04 (NL)	Questions about talks 5-8 Computing/AI (7 minutes)			
18:04-18:24 (JP) 10:04-10:24 (NL)	Talks 9-12 Computing/AI (5 minutes each)			
	9	Takuya Matsumoto (Osaka University)	Physical computing using neuromorphic molecular network	JP
	10	Aida Todri-Sanial (TU/e)	Design and implementation for physical computing	NL
	11	Miwako Tsuji	Quantum HPC Hybrid Software	JP

		(RIKEN)	Environment	
	12	Wilfred van der Wiel (BRAINS - University of Twente and Uni Münster)	Information processing in disordered nanomaterial systems	NL
18:24-18:31 (JP) 10:24-10:31 (NL)	Questions about talks 9-12 Computing/AI (7 minutes)			
18:31-18:51 (JP) 10:31-10:51 (NL)	Talks 13-14 Computing/AI + talks 15-16 Q communication (5 minutes each)			
	13	Albert Wong (University of Twente)	Exploring the programmability of Chemical Reaction Networks	NL
	14	Takehiro Yonehara (MitsuiChemicals.Inc)	Quantum computations aimed for advanced development of new materials Towards the elucidation of chemical reaction processes involving complex electronic states	JP
	15	Yang Miao (University of Twente)	Our current activities in 6G	NL
	16	Menica Dibenedetto (Maastricht University)	Brain Inspired Quantum Network	NL
18:51-18:58 (JP) 10:51-10:58 (NL)	Questions about talks 13-14 Computing/AI and 15-16 Q communication (7 minutes)			
18:58-19:15 (JP) 10:58-11:15 (NL)	Introduction of joint call / closing remarks			

Day2 “Semiconductor / Photonics / Computing”

Date: November 26, 2024

Time	Presenter		Presentation Title	Notes
17:00-17:05 (JP) 09:00-09:05 (NL)	JST/NWO		Intro JST/NWO	
17:05-17:10 (JP) 09:05-09:10 (NL)	Welcome Ambassadors JP/NL			
17:10-17:25 (JP) 09:10-09:25 (NL)	Talks 1-3 Semiconductor (5 minutes each)			
	1	Noritada Kaji (Department of Applied Chemistry, Kyushu University)	Single cell biophysics on a chip and future applications	JP
	2	Erika Kawakami (RIKEN)	Coupling Floating Electrons to Resonators	JP
	3	Tadao Nagatsuma (The University of Tokyo)	Devices and integration technologies for millimeter and THz wave system applications	JP
17:25-17:32 (JP) 09:25-09:32 (NL)	Questions about talks 1-3 Semiconductor (7 minutes)			
17:32-17:52 (JP) 09:32-09:52 (NL)	Talks 4-7 Semiconductor (5 minutes each)			
	4	Willem Vos (Complex Photonic Systems (COPS), MESA+ Institute, University of Twente)	Advanced Nanophotonic Structures to Manipulate Photonic Data including Single Photons	NL
	5	Shihab Al-Daffaie (Eindhoven University of Technology)	Terahertz devices for integration technology	NL
	6	Kazutoshi Kato (Kyushu University)	New Terahertz Frontiers Opened by Semiconductor Photonic Integrated Device Technology	JP
	7	Takeyoshi Tajiri (The University of Electro-Communications)	Semiconductor three-dimensional photonic crystals for photonic integrated circuits	JP
17:52-17:59 (JP) 09:52-9:59 (NL)	Questions about talks 4-7 Semiconductor (7 minutes)			
17:59-18:14 (JP) 9:59-10:14 (NL)	Talks 8 Computing/AI and 9-10 Photonics (5 minutes each)			
	8	Shino Ito (QunaSys)	QunaSys’ Quantum Computing Initiatives: Unlocking Industrial Applications for the Future	NL
	9	Allard Mosk (Utrecht University)	Maximum information states in optical metrology	NL

	10	Kiyo Ishii (National Institute of Advanced Industrial Science and Technology)	Photonic platform for future digital infrastructure	JP
18:14-18:21 (JP) 10:14-10:21 (NL)	Questions about talks 8 Computing/AI and 9-10 Photonics (7 minutes)			
18:21-18:36 (JP) 10:21-10:36 (NL)	Talks 11-13 Photonics (5 minutes each)			
	11	Thomas Julius van Els (QuiX Quantum)	Integrated photonics for scalable Quantum Computing	NL
	12	Oded Raz (Eindhoven University of Technology)	Advanced concepts in packaging and chip control	NL
	13	Alireza Shamsafar (Smart Photonics)	InP Photonic foundry model design via PDK	NL
18:36-18:43 (JP) 10:36-10:43 (NL)	Questions about talks 11-13 Photonics (7 minutes)			
18:43-19:00 (JP) 10:43-11:00 (NL)	Introduction of joint call / closing remarks			