2021 CAP Virtual Congress / Congrès virtuel de l'ACP 2021

Tuesday 8 June 2021

TS-7 Sensors and Metrology Symposium (NRC) / Symposium sur les capteurs et la métrologie (CNRC) (11:00 - 18:00)

-Conveners: Peter Mason

time	[id] title	presenter
11:00	Introductory Remarks - Dr. Julie Lefebvre, NRC	
11:05	[718] (I) Quantum Technologies in Sensing, Imaging, and Metrology: From the Laboratory to Near-Term Commercial Applications	Dr WILLIAMS, Carl
11:35	Questions and Discussion	
11:45	[714] (I) Quantum radiometry and metrology for single-photon detectors and emitters	Dr GAMOURAS, Angela
12:10	Questions and Discussion	
12:15	Break	
12:30	[704] (I) Toward tabletop, quantum-limited mechanical sensing and new optomechanical control	SANKEY, Jack
12:50	Questions and Discussion	
13:00	[705] (I) Applying Atom-Defined Building Tools to Make Quantum Sensing Devices	WOLKOW, Robert
13:20	Questions and Discussion	
13:30	[717] (I) Microwave entanglement generation and its application in quantum sensing	Prof. BARZANJEH, Shabir
13:50	Questions and Discussion	
14:00	Lunch session 14h00-15h00 - Government Interest in Quantum Sensing (Introduction)	
14:15	[703] (I) (Lunch session talk) Department of National Defence Quantum S&T Strategy	GUNTHER, Aimee
14:40	[706] (I) (Lunch session talk) NRC’s Quantum Sensors Challenge Program	MASON, Peter
15:00	[707] (I) Quantum Magnetometry with the Diamond NV-Centre	BRADLEY, Michael
15:20	Questions and Discussion	
15:30	[359] (G*) Achromatic multi-mode time bin interferometer for quantum networks	TANNOUS, Ramy
15:37	[664] (G*) Towards the atomic scale readout of single acceptor states in p-doped Si	YUAN, Max
15:44	[654] (G*) Hybrid Integration of III-V Nanowires Embedded with Quantum Dots on Photonic Integrated Circuits	YEUNG, Edith
15:51	[663] (G*) Optomechanical interface between telecom photons and spin quantum memory	SHANDILYA, Prasoon Kumar
15:58	[656] (G*) Suppression of Phonon-Mediated Decoherence using Frequency-Swept Laser Pulses in Optically-Driven Semiconductor Quantum Emitters	Mr WILBUR, Grant

16:05	[657] (G*) A portable diamond-based quantum demonstrator based on a quantum control and readout platform - Démonstrateur quantique portable à base de diamant, basé sur une plateforme de contrôle et de lecture quantique	BADAROUDINE, Azfar
16:15	Break	
16:30	[715] (I) Building Magnetic Intelligence: harnessing quantum magnetometry with the diamond NV-centre for end-user applications	TAYLOR, Rachel
16:50	Questions and Discussion	
17:00	[658] (U*) Photons in the Brain: Imaging Biophotons with Quantum Detectors	ZIBAKHSH, Rana
17:07	[659] (G*) Gated quantum dots in van der Waals materials	BODDISON-CHOUINARD, Justin
17:14	[661] (G*) Super-resolution Ghost-Imaging	GRENAPIN, Florence
17:21	[662] (G*) Multiplexed Single-Photon Source Based on Multiple Quantum Dots Embedded within a Single Nanowire	Mr LAFERRIÈRE, Patrick
17:30	Wrap Up	