

AGENDA (As of October 10, 2018)

GeneExpression Systems & Appasani Research Conferences Presents:
Quantum Science Symposium Europe – 2018 on
 Quantum Information, Computing and Communications to Semi-conductors & Graphene Research
Venue: Peterhouse, University of Cambridge, Cambridge, **United Kingdom**
Date: NOVEMBER 5 – 6, 2018

Organizer: KrishnaraoAppasani, PhD. GeneExpression Systems, Inc. of USA

	NOVEMBER 05, 2018 MONDAY (First Day)		NOVEMBER 06, 2018 TUESDAY (Second Day)
9:00 AM	REGISTRATION OPEN: Coffee/Tea & Refreshments	8:30 AM	REGISTRATION OPEN: Coffee/Tea & Refreshments
9:20 – 9:30 AM	Welcome Address by Organizer: KRISHNARAO APPASANI, PhD., MBA GeneExpression Systems, Inc. USA	8:55 – 9:00 AM	Welcome Address by Organizer: KRISHNARAO APPASANI, PhD., MBA GeneExpression Systems, Inc. USA
9.30 – 11.00 AM	Session I: Quantum Information Chair: Masato Koashi, PhD. JAPAN	9.00 – 10.30 AM	Session V: Quantum Computing Chair: Thierry Ferrus, PhD. UNITED KINGDOM
9:30 – 10:00 AM	Masato Koashi, PhD. Professor of Applied Physics University of Tokyo, JAPAN Title: Rigorous characterization method of photon-number statistics for quantum key distribution protocols	9:00 – 9:30 AM	Thierry Ferrus, PhD. Research scientist Hitachi Cambridge Laboratory, Cambridge, UK Title: Playing with donors and electrons in silicon device
10:00 – 10:30 AM	Michael Kues, Ph.D. Research Associate, Marie Curie Fellow University of Glasgow, Scotland, UNITED KINGDOM Title: On-chip frequency combs for scalable complex photonstate generation and control	9:30 – 10:00 AM	Ben Chiaro Physics PhD Student in the Lab of Dr. P. Roushan University of California Santa Barbara, CA, USA Title: gmon superconducting qubits: a programmable, high fidelity quantum simulation platform
10:30 – 11:00 PM	Farid Ablayev, PhD. Kazan Federal University Kazan, RUSSIA Title: Quantum hashing	10:00 – 10:30 PM	Yuuki Tokunaga, PhD. NTT Secure Platform Laboratories NTT Corp., Tokyo, JAPAN Title: Cavity-QED-based quantum computing
11.00 – 11.30 AM	Coffee Break	10.30 – 10.45 AM	Coffee Break
11.30 – 12.45 PM	Session II: Quantum Communications Chair: Krishnarao Appasani, USA	10.45 – 12.45 PM	Session VI: Quantum and Graphene Materials & Instrumentation Chair: Ute Kaiser, PhD. GERMANY
11.30 – 12.15 AM	KEYNOTE TALK: BRIAN D. JOSEPHSON, PhD., FRS Life-time Achievement Award Lecture Emeritus Professor of Physics & 1973 Physics Nobel Laureate University of Cambridge, Cambridge, UK Title: Should quantum scientists take note of complexity?	10.45 – 11.15 PM	Prof. Dr. Ute Kaiser, PhD. Central Facility of Electron Microscopy University Ulm, ULM, GERMANY Title: Understanding properties of quantum materials on the atomic scale by low-voltage TEM

12.15 – 12.45 PM	Hiromitsu Takeuchi, PhD. Lecturer in Physics Osaka City University, Osaka, JAPAN Title: Is a doubly quantized vortex unstable in uniform Bose-Einstein condensates at zero temperature?	11.15 – 11.45 PM	Michihisa Yamamoto, PhD. Unit Leader Quantum Electron Device Research Unit RIKEN Ctr for Emergent Matter Science, Wako, JAPAN Title: A localized spin in an electron wave cavity: measurement on the Kondo cloud length
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12:45 – 2:00 PM	1 Hour 15 min LUNCH BREAK (Provided)	12.15 – 12.45 PM	Kiyoshi Tamaki, PhD. Professor in the Faculty of Engineering University of Toyama, Gofuku, JAPAN Title: Information theoretic security of quantum key distribution overcoming the repeater less secret key capacity bound
2:00 – 3:30 PM	Session II: Quantum Communications Chair: Koji Azuma, PhD. JAPAN	12.45 – 1.15 PM	Saverio Russo, PhD. Associate Professor Centre for Graphene Science, CEMPS, Physics University of Exeter, Exeter, UNITED KINGDOM Title: Inverse charge funneling
2:00 – 2:30 PM	Koji Azuma, PhD. Senior Research Scientist & Distinguished Researcher NTT Basic Research Laboratories, Atsugi, JAPAN Title: Do black holes store negative entropy?	1:15 PM	End of 2nd day sessions
2:30 – 3:00 PM	Mohammad Al-Amri, PhD. Professor, The National Center for Applied Physics King Abdulaziz City for Science and Technology Riyadh, SAUDI ARABIA Title: Can we have quantum secure group communication?		
3:00 – 3:30 PM	Alessandro Casaburi, PhD. Lecturer in Electronic and Nanoscale Engineering University of Glasgow, Glasgow, UNITED KINGDOM Title: Quantum sensing with superconducting nano-strip based detectors		
3:30 – 4:00 PM	30 min. BREAK		
4.00 – 5:45 PM	Session III: Quantum Photonics & Nano-Electronics Chair: Wilfred G. van derWiel, PhD NETHERLANDS		
4:00 – 4:30 PM	Wilfred G. van der Wiel, PhD. Chair & Professor of Nanoelectronics MESA+ Institute for Nanotechnology University of Twente, AE Enschede, NETHERLANDS		

	Title: Pattern recognition with disordered dopant networks		
4:30 – 5:00 PM	Luke Wilson, PhD. Reader in Semiconductor Physics University of Sheffield, Sheffield, UNITED KINGDOM Title: Photon filtering using a quantum dot in a nano-photonic waveguide		
5:00 – 5:30 PM	Pavlos G. Savvidas, PhD. Associate Professor of Materials Science & Technology IESL-FORTH, University of Crete, Heraklion, GREECE Title: To Be Announced		
5:45 PM	End of 1st day sessions	1:15 PM	End of 2nd day sessions