QTS'20 PROGRAM

	Sunday, March 1	Monday, March 2	Tuesday, March 3	Wednesday, March 4	Thursday, March 5	Friday, March 6	Saturday, March 7
7:00 – 8:00		BREAKFAST					
8:30 – 13:30		WINTER SPORTS AND DISCUSSIONS / March 3 from 9:00 to 10:30 Laboratory "Hacking a single-photon detector" *					
13:30 – 14:30		LUNCH					
14:30 – 16:30	Check into the hotel from 15:00	14:30 – 16:00 LECTURE Evgeny Il'ichev Superconducting qubits: fundamentals and applications	14:30 – 16:00 LECTURE Marco Genovese Introduction to quantum imaging	14:30 – 16:00 LECTURE Philippe Grangier Optical Quantum Engineering	14:30 – 16:00 LECTURE Alberto Bramati Quantum Fluids of Light	14:30 – 15:00 LECTURE Vadim Makarov Improving security of a QKD system via an external audit 15:00 – 16:00 Round Table "Quantum Cryptography"	
		16:00 – 16:30 Alexander Chumadin Keysight Technologies solutions for quantum technologies	16:00 – 16:30 Jaroslaw Sperling Widely tunable CW Optical Parametric Oscillators in Quantum Technology Research	16:00 – 16:30 Eugene Duplyakin Activities, goals and objectives of the quantum cryptography testing laboratory	16:00 – 16:30 Andrey Zhilyaev Trusted nodes decomposition for scalable quantum key distribution network	15:00 – 16:00 LECTURE Sergey Astakhov The Outlook for the Quantum Technologies Market	
16.30–16.50		COFFEE BREAK					
16:50 -18:40	Registration at the Golden Tulip Hotel from 17:00 to 18:40	16:50 – 18:20 LECTURE Jacob Biamonte Modern Quantum Algorithms	16:50 – 18:20 LECTURE Zdenek Hradil Super-resolution achieving the ultimate limits of Quantum Fisher Information	16:50 – 18:20 LECTURE Marco Bellini Manipulating the character and shape of ultrashort quantum light states	16:50 – 18:20 LECTURE Mikhail Fedorov Schmidt decomposition for biphoton states	16:50 – 17:15 Sergey Mosentsov QKD organization principles in IDQ Clavis3 systems 17:15 – 17:40 Eldar Gayfutdinov Creating a quantum network management system and providing communication services based on it 17:40 – 17:55 Sergey Mosentsov SPAD: advanced manufacturing technologies and utilizing in QKD systems (Wooriro)	**The departure day**
		18:20 – 18:40 Sergey Mosentsov Components for leading quantum cryptography systems	18:20 – 18:40 Sergei Alferov Random number generators: from coins to quanta	18:20 – 18:40 Vratislav Blažek How to test photonic integrated circuits?	18:20 – 18:40 Sergey Khanenkov Research on the patent landscape of quantum technologies	17:55 – 18:40 Round Table "Prospects for commercializing quantum technology products"	
18.40–19.30	DINNER					DINNER	
19:30 – 22:30	19:30 – 20:30 Inception meeting	19:30 – 21:00 LECTURE Nikolai Kolachevsky Ion-based platform for quantum logic	19:30 – 21:00 LECTURE Shigeki Takeuchi Quantum sensing using entangled photons	19:30 – 21:00 LECTURE Luis Lorenzo Sanchez Soto Quantum extremal states	19:00 – 23:00 SCHOOL DINNER	Best Poster Awards	
	20:30 – 22:30 Welcome party	**21:00** – 21:40 Poster Pitch 21:40 – 22:30 Round Table "Quantum Computing"	**21:00** – 22:30 Poster 1	**21:00** – 22:30 Poster 2		Concluding remarks	

* Description: The demo will show how to test a single-photon detector for a blinding attack in a laboratory. When the detetor has this vulnerability, a quantum key distribution system using it may be compromised (as we will explain) [1]. Despite being known for the past ten years, this security vulnerability has not been completely closed.

[1] L. Lydersen et al., Nat. Photonics 4, 686 (2010).