NCCR SPIN Annual Meeting 2023

Monday, June 19, 2023

Time		
10:00	Scentific Advis	sory Board Meeting
	Individual Tra	vel Arrangements
12:57	Arrival Train at	Pontresina Station
13:24	Arrival Train at	Pontresina Station
	Lunch buffet (op	oens 13:15 until 14:00)
14:00	o _l	pening
	Hole Spins Si	
14:10	Petar Tomic (ETHZ) Transport characterization of FinFET M	IOS stack
14:25	llan Bouquet (ETHZ) Simulation of double quantum dot p-	
14:40	Andreas Kuhlmann (Basel)	type si Fin-Ei
14:55	The Si FinFET MOS qubit platform Matthias Mergenthaler + Jessica Ric	chter (IBM)
	Improving the Si FinFET MOS qubit plat	
15:10	Stefano Bosco (Basel) Theory of hole spin qubits	
15:25	Break (30 min)	
	Hole Spins Ge	
15:55	Santhanu Ramanandan (EPFL) Strategies for achieving high quality (Se nanowires
16:10	Marcin Kisiel (Basel)	
16:25	Scanning probe microscopy of nanov Miguel Carballido (Basel)	vire qubit devices
	Sweet spots and 2Q gate at 1.5 K	
16:40	Eoin Kelly (IBM) Crosstalk in gate-based dispersive readout	
16:55	Rafael Eggli and Simon Svab (Basel)	
17:10	Dispersive readout with STO varactors Simone Frasca (EPFL) High-kinetic inductance magnetic field compatible parametric amplifiers	
17:25	Poster	Flash-Intro
17:50	P	er Session
	Post	ersession
18:30	Dinner	
	Innovation Session	
20:30	David Gunnarsson, CTO Bluefors	
21:15	Fireside Chat Young Researchers	General Assembly
22:00	Evening Reception	

Tuesday, June 20, 2023

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Time		
07:30	Breakfast	
	Hole Spins planar Ge	
09:00	Arianna Nigro (Baset) rowth and characterization of Ge/Sil-x Gex planar heterostructures for spin qubits applications	
09:15	Eric Jutzi (Basel) The hunt for the last hole in a planar Ge DQD	
09:30	Franco De Palma (EPFL) Progress toward hybrid-cQED with holes in germanium	
09:45	Leonardo Massai (IBM) Mitigating hysteresis and noise in Ge:SiGe hole spin qubits	
10:00	Break (30 min)	
	Theory	
10:30	Lidia Stocker (ETHZ) RKKY-based entanglement bus in spinful cavity-double-dot systems	
10:45	Henry Legg (Basel) Determination of spin-orbit interaction in Ge via non-linear transport	
11:00	Alexander Miessen (IBM) A hybrid quantum-classical method for electron-phonon systems	
11:15	Guido Burkard (Konstanz) 30' Probing spin qubits and their environment with cavity QED	
11:45	Alexandra Beckstein (QAI Ventures) Building a Quantum Ecosystem by Investing and Accelerating	
12:05	Group Photo	
12:15	Lunch Bags & Hikes	
17:00		
,,,,,,,	Poster Session	
18:30	Conference Dinner	
20:30	Poster Session	
21:30	Young Researchers Forum	
22:00	Evening Reception	

Wednesday, June 21, 2023

Time		
07:30	Breakfast	
	Spins	
09:00	Wister Huang (ETHZ)	
	Spin and valley lifetimes in graphene quantum dots	
09:15	Lukyi Cheung (Basel) Towards two coupled Andreev spin qubits	
09:30	Fabrizio Nichele (IBM)	
	Large spin-orbit-splitting of Andreev states in a 3T Josephson junction	
09:45	Jann Ungerer (Basel)	
	Strong coupling of a singlet-triplet qubit to a photon	
10:00	Break (30 min)	
	Electrons and Architecture	
10:30	Michele Aldeghi (IBM)	
	Modular nanomagnet design for spin qubits confined in a linear chain	
10:45	Adrian Ionescu (EPFL)	
	Quantum dots array based on SOI nanowires with ferromagnetic Co	
11:00	Cesar Zota (IBM) Cryo control electronics	
11-15	Bence Hetenyi (IBM)	
11.15	Surface code for spins	
11:30	Awards & Conclusions	
11:45		
11.443	Lunch Bags & Departure	
	Departure Train from Pontresina Station	
	Individual Travel Arrangements	