



# Table of contents

Thursday 14 September 2017 .....	1
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# Workshop on Quantum Science and Quantum Technologies | (smr 3183)

## Thursday 14 September 2017

- Budinich Lecture Hall (LB) (09:00-18:15)

time	title	presenter
09:00	Fundamentals of cavity quantum optomechanics	ALEXEY FEOFANOV
09:35	Elements for scalable quantum information science with trapped ions	CHRISTOF WUNDERLICH
10:10	Quantum Acoustics and Acoustic Traps and Lattices for Electrons in Semiconductors	GEZA GIEDKE
10:45	Break	
11:15	Trustworthy quantum simulators	JENS EISERT
11:50	Exploring interacting topological insulators with ultracold atoms: the synthetic Creutz-Hubbard model	MATTEO RIZZI
12:25	Criticality and phase Diagram of Quantum Long-Range Systems	ANDREA TROMBETTONI
13:00	Lunch break	
15:00	Polynomial approximation of non-Gaussian unitaries by counting one photon at a time	FRANCESCO ARZANI
15:15	Fast and robust phase gates with trapped-ion hyperfine qubits	IñIGO ARRAZOLA
15:30	Efficiency and power of superadiabatic quantum engines	OBINNA ABAH
15:45	Role of computational quantum mechanics in biomolecules	DEEPA PALANISAMY
16:00	Break	
16:30	Quantumness of correlations in Fermionic systems	TIAGO DEBARBA
16:45	Quantum shape effects on thermodynamic quantities	ALHUN AYDIN
17:00	Frozen quantum correlations	TITAS CHANDA
17:15	Classical discord and distortion	NIGUM ARSHED
17:30	New Bell inequalities for three-qubit pure states	ARPAN DAS
17:45	Entangled hypergraphs vs. hypergraph states and their role in classification of multipartite entanglement	MASOUD GHARAHİ GHAHI
18:00	Necessarily transient quantum refrigerator	SREETAMA DAS