## SUMMER SCHOOL

## TU WIEN, ATOMINSTITUT, VIENNA 18TH - 22ND SEPTEMBER 2017

	Monday	Tuesday	Wednesday	Thursday	Friday
0915-0930	Welcome			-	
0930-1100	Seth Lloyd Quantum machine learning	Audrey Cottet The Mesoscopic QED architecture and its microscopic description	Darrick Chang Introduction to atom- nanophotonics interfaces	Nathan Goldman Instabilities in driven atomic gases	Antoine Browaeys  Many body-physics using  Rydberg atoms
1100-1130	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
1130-1300	Antoine Browaeys Basics on Rydberg atoms and their interaction	Seth Lloyd Applications of programmable nanophotonics to quantum information processing	Audrey Cottet Cavity read-out in Mesoscopic QED: compressibility measurements and strong coupling regime	Darrick Chang A quantum "spin model" of atom-light interactions	Nathan Goldman Heating atoms as a probe for topological order
1300-1430	Lunch Break	Lunch Break*	Lunch Break	Lunch Break	Lunch Break
1430-1600	Seth Lloyd  Quantum machine learning - implementations using programmable optics	Nathan Goldman Topological matter by shaking (atomic gases)	Antoine Browaeys Manipulation of individual Rydberg atoms: blockade and entanglement	Audrey Cottet Review of recent experiments and perspectives for the detection of Majorana modes	Darrick Chang Complex quantum matter built from atoms and photons
1600-1630			Coffee Break	Coffee Break	
1630-1830	Poster Session 1 See list of abstracts, available online	Poster Session 2 See list of abstracts, available online	Toptica Talk: 1630-1700  Student Talks  See separate timetable	Student Talks See separate timetable	Farewell [Lab tours]
1930-Open 2100-Open		Social Activity	Conference Dinner		*Conference Photo before lunch break, details to be announced