



# Quantum Technologies for Fundamental Physics

## Tuesday, 5 September 2023

### Tests of Quantum Mechanics: Session 1 (09:00 - 10:30)

-Conveners: David Kaplan

time	[id] title	presenter
09:00	[55] Test of Causal Non-Linear Quantum Mechanics by Ramsey Interferometry on the Vibrational Mode of a Trapped Ion	RAJENDRAN, Surjeet
09:25	[56] Towards tests of causal nonlinear quantum mechanics using light-pulse atom interferometry	MAKARAND DESHPANDE, Tejas
09:50	[57] Cryogenic test runs in preparation for NLQM searches	MELNYCHUK, Alex
10:15	[58] Discussion	

### Tests of Quantum Mechanics: Session 2 (11:30 - 13:00)

-Conveners: Surjeet Rajendran

time	[id] title	presenter
11:30	[59] Experimental measurement of the Bell parameter with a Single entangled pair	GENOVESE, Marco
11:55	[60] Quantum metrology of noisy spreading channels	MACCONE, Lorenzo
12:20	[78] Francesco Muia - GW	MUIA, Francesco
12:45	[61] Discussion	