



# The Time Machine Factory [unspeakable, speakable] on Time Travel -TM2019

## Thursday, 10 October 2019

### Investigating the fundamental properties of physics: chair Eliahu Cohen (11:25 - 13:00)

time	[id] title	presenter
11:25	[65] Superpositions of Mesoscopic Objects for Sensing Quantum Gravity and Gravitational Waves	Prof. BOSE, Sougato
12:10	[33] Superpositions of causal orders in a timeless universe	Prof. VEDRAL, Vlatko
12:55	[14] Conjectures on SpaceTime	Dr CAPURSO, Alessandro

### Investigating the fundamental properties of physics: chair Ivano Ruo Berchera (14:20 - 17:30)

time	[id] title	presenter
14:20	[34] Locality and causality in the Aharonov-Bohm effect	Dr MARLETTO, Chiara
15:00	[66] Pseudodensity Matrix of a quantum optical system as a tool for visualizing open timelike curves.	Dr GENOVESE, Marco
15:30	[35] Quantum enhanced correlated interferometry for Planck scale physics	Dr LOSERO, Elena
16:00	Coffee BREAK	
16:30	[12] Contrary Inferences for Classical Histories in the Consistent Histories Approach	Dr ZAMPELLI, Adamantia
16:50	[21] Conditional probabilities, relativistic quantum clocks, and the trinity of relational quantum dynamics	Dr SMITH, Alexander R. H.
17:10	[4] Quantum field theories with quantum causal structure	Dr JIA, Ding