## **Quantum Technologies within INFN: status and perspectives**

## Tuesday, 21 January 2020

## Session III: Contributions from the scientific community - Aula Magna Lepschy (12:30 - 13:00)

time	[id] title	presenter
12:30	[58] Quantum Information Transfer in Positronium Annihilation	MARIAZZI, Sebastiano
	[59] DEMETRA: DEcoherence Mitigation through EnvironmenTal Radioactivity Abatement	CARDANI, Laura

## Session III: Contributions from the scientific community (continued) - Aula Magna Lepschy (14:00 - 18:15)

time	[id] title	presenter
14:00	[60] Quasi-Instantaneous online trigger based on optical neural network	Dr SANVITTO, Daniele
14:15	[61] Quantum Computation of Thermal Averages in the Presence of a Sign Problem	CARDINALI, Marco
14:30	[62] Certification of multiphoton experiments/Engineering and characterization of structured light	SUPRANO, Alessia Mrs GIORDANI, Taira
14:50	[63] Quantum noise reduction in the interferometric gravitational wave detector Virgo/EPR experiment for gravitational wave detectors	ZENDRI, Jean-Pierre SEQUINO, Valeria
15:10	[64] Nanowires quantum detectors	BELLANI, Vittorio
15:25	[65] Magnetic sensing with laser-synthesized nanodiamonds	MIOTELLO, Antonio
15:40	[66] A macroscopically extended coherent state in Er:YSO	BRAGGIO, Caterina
15:55	Coffee break	
16:20	[67] Implantation of silicon-vacancy single-photon emitters at the Tandetron accelerator of INFN Florence for application in quantum technologies	LAGOMARSINO, Stefano
16:35	[68] "PHOS4BRAIN: Design and operation of Silicon Photonics optical links, as enabling technology for quantum communications	CIARPI, Gabriele
16:50	[69] Use of silicon photonic integrated circuits in quantum computing applications	SALAMON, Andrea
17:05	[70] The SIMP project	GATTI, Claudio
17:20	[71] Optimal Control for the Quantum Simulation of Nuclear Dynamics	PEDERIVA, Francesco
17:35	[72] Optical links for atomic gravity sensors	SORRENTINO, Fiodor
17:50	[73] Bell inequalities violation by entangled single photon states generated from a laser, a led, or a halogen lamp	Dr AZZINI, Stefano MORETTI, Valter