SIRTEQ Annual meeting 11 october 2019

08:30-09:15	Welcome coffee and installation of the posters	
09:15-10:00	Opening and introduction	Philippe GRANGIER
	Presentation of SIRTEQ	Yara HODROJ
	Presentation of Paris Region	Stéphane LOUISIA
Quantum sensors and metrology		
10:00-10:15	Presentation of quantum sensor and metrology	Franck PEREIRA
10:15-10:40	Towards the quantum projection noise in optical lattice clocks	Rodolphe LE TARGAT
10:40-11:10	Coffee break	
Quantum computing		
11:10-10:25	Presentation of the quantum computing theme	Patrice BERTET
11:25-11:50	A microwave cryogenic probe station for quantum technologies	Erwann BOCQUILLON
Scientific valorisation, events and training		
11:50-12:10	Valorisation for SIRTEQ	Pascale SENELLART
12:10-12:25	Experience of accompaniment and support of valorisation with SIRTEQ	Jocelyn ACHARD
	Communication :Events, Training & conferences	Michèle LEDUC
12:25-14:00	Lunch & posters	
Enabling sciences and technology		
14:00-14:15	Presentation of the the enabling science & Tech	Takis KONTOS
14:15-14:40	On chip quantum light generation and manipulation in AlGaAs devices	Maria AMANTI
Quantum simulations		
14:40-15:00	Presentation of quantum simulation theme	Hélène PERRIN
15:00-15:20	Towards cryogenic trapping of single atoms in optical tweezers	Thierry LAHAYE
Quantum communications		
15:20-15:35	Presentation of Quantum communications	Eleni DIAMANTI
15:35-16:00	Integrated quantum optics using quantum dots and molecules	Richard HOSTEIN
16:00-17:20	Private discussion of the Scientific committee in parallel with poster session and coffee	
17:20-17:45	Feedback of the Scientific committee	
17:35-17:45	Conclusion & Poster prize	Philippe GRANGIER

List of Posters

Quantum sensors and metrology

1- Dynamically induced 0-Ïϵ transition in a carbon nanotube-based Josephson Junction
2- A molecular clock for testing the parity symmetry in cold chiral molecules
3- Atomic qubits protected from decoherence by strong coupling to a fiber-based optical cavity
4- Ab initio Modeling of the NV center at high pressure in Diamond for the Detection of Superconductivity
5- Rare-earth ion doped crystals for quantum metrology
6- CIEL - Counting Infrared Light
7- Quantum probes for superconductors under pressure and electrical current mapping
8- Spin-cooling of the motion of a trapped diamond
9- Cooling a spin ensemble with a cavity
10- Growth of CVD nanodiamonds containing highly emissive SiV and GeV colour centres.
11- Towards precision spectroscopy of molecular hydrogen ions
12- Towards the supervision and the scientific data processing of a optical frequency transfer fiber network

Quantum computing

13- Quantum simulation and computing with arrays of neutral atoms
14- Hybrid Entanglement Witness
15- Semiconductor sources of photonic cluster states
16- Quantum engineering of photon-photon interactions with Rydberg atoms in a cavity
17- Exponential suppression of bit-flips in a qubit encoded in an oscillator
18- Integrated indefinite causal structures for quantum information processing
19- Versatile entanglement on chip for quantum technologies
20- Quantum Protocol Zoo

Quantum Simulations

21- Quantum magnetism of high spin fermionic strontium
22- Direct laser cooling to Bose-Einstein condensation
23- Ultracold atoms in strong disorder: towards the Anderson transition
24- Two-body collisions in the time-of-flight dynamics of lattice Bose superfluids
25- Towards quantum simulation with laser-trapped circular Rydberg atoms
26- Optical shielding in ultracold 39K-Cs binary collision

Enabling sciences and technology

27- Manipulation of Nitrogen-Vacancy centers using electrons and photons
28- Optimization of Nitrogen doped (113)-oriented diamond films for quantum sensing
29- Coherent manipulation of Andreev states in InAs-based weak links

Quantum communications

30- High Efficiency Quantum Memory in Multiplexed Large-OD Cold Atomic Ensemble
31- Generation and manipulation of high-dimensional frequency states on a semiconductor chip
32- Quantum storage of one-photon and two-photon Fock states with an all-optical quantum memory
33- Fibered photon-pair generation without Raman-scattering
34- Quantum optics with nanofiber-trapped atomic arrays in the evanescent field
35 Everlasting Secure Key Agreement with performance beyond QKD in a Quantum Computational Hybrid security model
36- Plasmon mediated interactions between fluorescent emitters: from weak to strong coupling regime
37- Engineering two-photon wavefunction and exchange statistics in a semiconductor chip
38- Génération de paires de photons en régime continu par mélange à quatre ondes dans les nanofibres